

Manufacturers Record

Exponent of America



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Baltimore, Md.
SEPTEMBER 13, 1923

The Creative Power of Chemistry.

The National Exposition of Chemical Industries which will be held in New York the week of September 17-22 will give to every student of chemistry—and who is there that does not marvel at the miracles wrought by the chemist—an opportunity of studying some of the achievements that have been made by the thousands of chemists who in this country have brought forth wonders more marvelous than the wildest romancers of the past would ever have dared to predict.

Into every line of human endeavor, on the farm, in the fruit orchard or citrus grove, in the raising of livestock, and in the factory, whether that factory be manufacturing pins, or locomotives, or steel rails, or building battleships, chemistry is at the foundation of every successful achievement. We could not build our railroads without the work of the chemists in the making of iron and steel. We could not build the battleships except for the work of the chemists, nor provide the explosives for their use. We could not have conquered the air except through the work of the chemists. Humanity would perish for lack of food but for the work of the chemist in the production of fertilizers and in the treatment of soils. All-pervading and almost all-powerful in its operations, chemistry appeals to the imagination as a science whose possibilities are almost as boundless as is the universe. What the chemist has done is merely a hint, a suggestion of what the chemist will yet accomplish.

Tens of thousands of the foremost business men of America will at the Chemical Exposition study some of the things that have been achieved by chemistry, and new possibilities for the advancement of their own business will be explained to them.

At that exposition a few Southern interests will be represented with exhibits which may indicate something of the possibilities of this section; but for every dollar expended by Southern interests in making exhibits there, hundreds of dollars should have been spent—yes, thousands of dollars—by other interests, for everything which could be made to tell the story of chemical possibilities of the South should be on display that the tens of thousands, perhaps hundreds of thousands of the foremost men of America—bankers, manufacturers, merchants, chemists, investors—might in this picture of the South's chemical possibilities see limitless opportunities for investment to their own profit and to the prosperity of the South.

But the exhibits which are there should be studied by men of the South and of the North and of the West, and other people of other lands who will be in attendance. The South should by this opportunity be stirred to do greater things in the future; and the officers of every railroad in the South not represented should hang their heads in shame that they have fallen so far short of the opportunity presented to them to make known the advantages of their sections.

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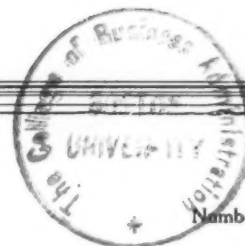
KANSAS CITY, MO.

R. B. WHITE, President and Gen. Mgr.

Manufacturers Record

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SEPTEMBER 13, 1923



Volume LXXXIV

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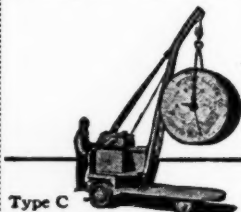
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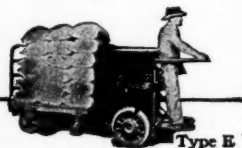
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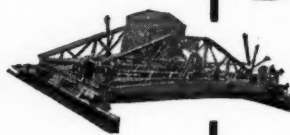
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Manufacturers Record

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Inasmuch-Japan.

Matthew 25th Chapter, Verses 31 to 46, both
inclusive.

JAPAN needs our help. Millions of its people are homeless and many are starving. Disease and death stalk abroad throughout that land of unvoiceable woe and suffering. Their calamity is our opportunity.

Instead of a \$5,000,000 contribution as suggested, our gifts should be many, many times that amount. Foodstuffs of every kind, building materials, medicines and many other things should be rushed to Japan by the swiftest ships available. The South should pour its rice out to these people without stint; the West should ship its flour with equal vigor, and our sympathy and our love should go with every gift, and thus out of this immeasurable and inscrutable catastrophe Almighty God can bring forth a blessing to the world if we do our part.

Inasmuch—

What shall our answer be?

AS VIEWED BY A WISCONSIN BANKER.

The Waukesha National Bank

Waukesha, Wis., September 1.

Editor Manufacturers Record:

May I be permitted to commend the MANUFACTURERS RECORD for its wonderful illuminating articles upon the development of the South and various other live topics which engage the attention of all thinkers today.

The comprehensiveness of your investigations, and the uprightness of your conclusions, cannot fail of approbation from all thoughtful, liberty loving citizens.

Your August 30 issue, on its title page, to our mind, contains from three Presidents the foundation non-political principles of human progress.

The nation is greatly indebted to the MANUFACTURERS RECORD.

ANDREW J. FRAME, Chairman.

Praise from Sir Hubert is praise indeed.

LATIN AMERICAN TRADE INCREASE CONTINUES.

A CONTINUATION of the gratifying increase in trade with Latin America reported by the Department of Commerce from time to time during the last few months is shown in the July trade figures, according to Dr. Julius Klein, Director of the Bureau of Foreign and Domestic Commerce.

The figures just given out afford comparison between July of this year and of 1922, and between the seven-months periods ending July 31 of the two years. For this seven months period they show a gain in our exports to every one of the Latin American countries. While the gain for the world was only 0.006 per cent, that to all Latin America was a little over 21 per cent from \$304,455,000 to \$370,575,000. Gains of the various countries ranged from about 8 per cent for Ecuador and Mexico to 12 per cent for Brazil, 26 1-2 per cent for Central America, 28 per cent for Colombia, 31 per cent for Argentina, 32 per cent for the Dominican Republic, 36 per cent for Uruguay, 37 per cent for Peru, 38 per cent for Venezuela, 56 per cent for Chile, and 63 per cent for Cuba. For the month of July alone, notwithstanding that several of the countries, especially Brazil and Ecuador, showed a considerable decline from the figures of July 1922, there was nevertheless a gain of 29.2 per cent in exports to Latin America, as compared with .0063 per cent for the whole world.

Practically all of our export commodities ordinarily taken by Latin America shared in this increase. The more important items are steel rails, galvanized iron sheets, wire nails, automobiles and trucks, book paper, pianos, flour, naval stores, lumber and manufactures of wood, mineral oils, white cotton goods, sewing machines and cash registers. Some of the items failing to show an increase are meat and meat products, fish, sugar, molasses and syrup, coal, locomotives, newsprint paper and typewriters.

In the meantime our imports from Latin America continued to gain to an even greater extent. For the seven-months period the gain from all South America was 61.6 per cent and from all Latin American 50 per cent or from \$459,212,000 to \$689,645,000 as against 42 per cent for the whole world. The gain in imports from Cuba was 62 per cent, from Uruguay 104 per cent, from Argentina 113 per cent, and from Chile 120 per cent. Ecuador and Venezuela both showed slight decreases.

"It is a reasonable assumption," states Dr. Klein, "that this continued increase in the face of the unfavorable dollar exchange in most Latin American countries, indicates the favor in which American products are held in those countries. The betterment of general economic conditions, with a consequent larger purchasing power and increased exchange values, through heavy investments of American capital, should place the United States in an even more favorable position than it now holds."

WELCOME

To the Manufacturers Record Booth at the Chemical Exposition.

TO those attending the National Exposition of Chemical Industries at the Grand Central Palace in New York, the week of September 17-22 the Manufacturers Record extends a cordial invitation to visit its booth on the second floor.

Chemists, chemical engineers, business men and others from the South, or identified with Southern properties, are especially invited to make our booth their headquarters and join with us in showing visitors that the South, with its vast stores of diversified minerals, water-powers, railroad facilities and other advantages, offers unequaled opportunities for chemical development.

If you are seeking any facts about the sixteen Southern and Southwestern States, we will gladly furnish them or place you in touch with those who can.

HOW TO SECURE THE BEST COMPETITIVE RESULTS.

The Bank of Walterboro,
Walterboro, S. C., August 24.

Editor Manufacturers Record:

For your information we wish to advise that the Walterboro School District No. 19, \$59,000 bonds issued for the purpose of repairing the present building and building a high school, were sold yesterday to Sidney Spitzer & Company. Their bid was for 6 per cent semi-annual bonds and they paid a premium of \$2375 and accrued interest.

Your paper carried the only advertisement of these bonds and we got around 150 inquiries in response thereto. We cannot speak too highly of the Manufacturers Record either as an advertising medium or as a magazine devoted whole heartedly to the upbuilding of the South.

C. G. Padgett, Secretary Board of Trustees.

"CRAPE HANGERS."

IN a recent circular to its depositors the National Union Bank of Baltimore, taking an optimistic view of the business situation, closed with this statement:

"It seems to me that it's time for Crape Hangers, Limited, to celebrate their own funeral and let the old reliable firm of Hard Work, Unlimited, collect the profits for the rest of 1923."

Crape hangers are not wanted. They are not needed. There is no mourning throughout the land. On the contrary, life is abounding with business possibilities, and if all the "crape hangers" as to business could be promptly buried the world would be the better for their departure.

TOO MUCH LEGISLATION IS THE TROUBLE WITH THE COAL AND OTHER INTERESTS.

GOVERNMENT control of the railroads and excessive regulation was blamed by C. C. Morfit, Secretary of the Tug River Coal Operators' Association, not only for many of the troubles in the railroad industry but in the coal industry, in the course of a recent address delivered at the Teachers' Institute of McDowell County, West Virginia.

Mr. Morfit stated among other things that "Coal may be produced but cannot be transported to market without transportation facilities and transportation must keep pace with the progress of industry. Otherwise industry becomes choked and stagnated. The marketing of coal, and it is upon its successful marketing this section of the country depends, has been accompanied by efforts of the producer to educate the consumer as to what fuel is especially adapted to his needs. Anthracite coal is an example of the extent to which this education has been carried. There are certain sections of the country that conscientiously believe they can burn no other fuel."

In connection with the confusion generally existing throughout the country as to coal and a shortage of coal, Mr. Morfit declared that the trouble was not with coal or any lack of production but was directly traceable to transportation difficulties. He declared that government control of the railroads was responsible for throwing transportation machinery out of gear so often. He used the railroad illustration with corresponding loss of efficiency and money under federal control because, he said, so many radical politicians of today are strongly advocating government control of the coal and railroad industries. The Interstate Commerce Commission, too, he declared to be another factor in disturbing transportation conditions by its frequent change in basic freight rate differentials so essential for the continuance of prosperity. He likened the Interstate Commerce Commission to a boy digging under a sandbank without taking into account the danger involved. Discussing the subject further, Mr. Morfit said:

"It is government control and regulation of transportation that has disorganized and demoralized not only the railroads, coal and other industries but even has spread alarm and discontent throughout the country.

"In the case of the Northwest farmer, let us see what has been done to him and his coal. The Interstate Commerce Commission changed the rates of coal so the inland movement from the upper Lake docks would not continue in customary volume. The grain and ore people had to have coal, and the change in rates made it cheaper for them to obtain this commodity from the nearer source of supply in the West. It is true in so doing, they obtained their coal at a much lower freight rate to their bins, but in doing so they have forced the Lake vessels (speaking generally) to carry a load one way, returning in ballast, and in like manner the cars from this end too have only a one-way load movement.

"The people of the Northwest are now stampeding and want to know why freight rates are so high and why they are unable to find a market for their product. They have even reached the point where they believe by the election of such men as Magnus Johnson, their ills may be cured by legislation; not realizing their sickness is due to too much legislation and governmental and bureaucratic attempts to control industry and railroads.

"We cannot and never will be able to correct so-called evils which may result from the operation of the unchangeable law of supply and demand, by legislation.

"We cannot guarantee the farmer or any one else a minimum price for his product without doing likewise for every other producer.

"Let us all do what we can to curb this mistaken idea, preached by some professional politicians, that legislation is the panacea for all business ills.

"Let us do what we can to prevent the railroads from being made the football of the officeholder. When this is done, not only coal alone, but we all will be benefitted."

The World-Wide Increasing Narcotic Habit.

MR. COURTENAY DEKALB, one of the leading scientific men of the country, in a recent article in the *MANUFACTURERS RECORD* credited some of the world-wide drug forming habit to the under-nourished condition of a large part of the world. Mr. DeKalb's article was an exceedingly suggestive and illuminating one, but J. Frank Chase, Secretary of the New England Watch and Ward Society, Boston, in a letter to this paper took exception to the position expressed by Mr. DeKalb. A copy of Mr. Chase's letter was sent to Mr. DeKalb in order that he might reply if he so desired. The two letters are given below.

Mr. Chase presumes to suggest that Mr. DeKalb's "generalization is based upon too few particulars." If Mr. Chase has one-half of the information on world affairs that Mr. DeKalb has, and can state it with the experience and accuracy and the exactness of the scientifically trained mind as Mr. DeKalb can, he has failed to sustain that position in his letter. The subject is one of such world-wide interest in view of the growing drug habit throughout the world as to be worthy of the most careful study. In his article Mr. DeKalb pointed out that this drug habit is increasing in Spain and France and in other countries where prohibition of the liquor traffic does not prevail, and that, therefore, the claim of the liquor people that prohibition is increasing the drug habit in this country has no foundation in fact. Mr. Chase's letter follows:

The New England Watch and Ward Society,
Boston, Mass., August 20.

Editor Manufacturers Record:

I am grateful to you for the copy of the *MANUFACTURERS RECORD* of July 27 with the article entitled "The Under-nourished World Craves Stimulants and Excitement," by Courtenay DeKalb.

I have read the article with much interest, and it is a statement of one of those theories which sounds well but will not stand the test of wide knowledge of facts concerning the narcotic evil.

In Cambridge, Mass., we used to have a sign "This is the Centre of the Universe. We will give any man \$1000 who will prove that it is not so." I never heard of anyone collecting the \$1000 for the simple reason that it was impossible to prove the negative.

I do not believe that the theory of Mr. DeKalb is sound, and I state that upon the experience which I have had with the drug evil since 1908 when we had a larger prevalence of the habit in Boston than we have ever had since that time though I do believe that the drug habits have extended throughout the world since that time more than were known to have extended up to that time.

My theory is that since the amount of acreage for the growth of opium has not diminished since the British treaty with China, and since this treaty closed the Chinese market to the product grown in India, and since China is not consuming one-tenth of the opium today it consumed before the treaty, my theory is that there is a vast amount of opium that formerly went to China which is finding markets throughout the world by smuggling and other illegal practices, and my theory is that the increase of the use of opium and its derivatives will increase until the world finds a means of diminishing the acreage and striking at its source the product which finds a market and will find a market as long as it exists.

The habit spreads like smallpox by the infection of experience from one person to another, and from one country to another.

I do not know Mr. DeKalb, but his generalization I am quite sure is based upon too few particulars.

J. FRANK CHASE, Secretary.

Following is Mr. DeKalb's letter:

New Orleans, La., August 30.

Editor Manufacturers Record:

The letter of Mr. J. Frank Chase dated August 20, possesses singular significance through attributing the narcotic habit to a covert British trade propaganda. To clarify the matter for those unfamiliar with the history of opium productions, it must be understood that Great Britain has jealously guarded this nefarious business for nearly a century. In

1840 the British representative in China was regarded as too humanitarian to insist on the prerogatives of trade in such a case as the opium traffic, and Sir Henry Pottinger was appointed to the office, under whom the so-called "opium war" was waged with fire and sword against defenceless China in order to force open her ports to trade, including specifically the importation of opium, which had been declared contraband by the Chinese Government. Incidentally, China was further punished for her endeavor to obstruct the opium trade of British India by requiring the cession of Hongkong under the terms of the treaty of Nankin in 1842.

The opium traffic debauched the people of China for many decades, until finally the Government made another attempt to throw off the yoke in 1907. An agreement was then reached between China and Great Britain, renewed in 1911, whereby the latter country was to reduce the exportation of opium to China annually by stated quantities, and furthermore was to reduce the acreage devoted to poppy culture in India by a corresponding amount, the avowed object being to extinguish the business altogether by 1917. As Mr. Chase says, the British have not complied with this obligation to reduce the acreage, and therefore, since the opium habit had been reduced enormously in China (Mr. Chase says by 90 per cent), it is evident that contraband opium must be available in large volumes throughout the world.

If the habit in other countries were restrained as in China, the culture of this pernicious drug would rapidly languish. The fact is that the experience of China shows that Mr. Chase's explanation of 'infection' is inadequate to account for the sudden growth of the narcotic habit in other countries. It did spread from one user to another in China in the old days, but this kind of propagation has not been sufficient to thwart the restrictive measures applied by that country.

Another, and perhaps the commonest, explanation is that the physicians are to blame for accustoming their patients to the use of narcotics. That widespread medical abuse of such drugs exists is generally accepted as a fact.

The spread by example and imitation, and the encouragement of the narcotic habit by careless medical prescription, doubtless are strongly contributory causes. Back of all this, however, is the fact that health renders resistance to all vices easier, and health is inseparable from an abundance of good food attainable at reasonable prices.

In trying to find a cause for a new phenomenon that has loomed suddenly through the civilized world, it is necessary to scrutinize every condition that has also suddenly changed in the hope of finding an explanation. This is to apply the rules of logic, which are sound and trustworthy.

To be sure, as Mr. Chase remarks, if the production of opium were reduced to the necessary therapeutic minimum, there would be no narcotic victims. The great difficulty is to leave all the other factors in the equation with their normal values and to apply zero as the value of the narcotic-production factor. England could, if she would, effectively prohibit the culture of opium in India. She agreed to do so, and then failed to carry out her bargain. She might encounter political opposition, even if she should try to introduce compensatory industries. She might need the help of other nations to sustain the political status quo deemed essential from an imperialist viewpoint, while she took suitable precautions to maintain the peace in India. It is conceivable that the statesmen of other nations, conscious of the moral support of the good citizens, who are always in the majority, though not always obtrusively in evidence, would sustain England in any such crusade for the welfare of the race. Opium culture, however, leads to business, not only for wealthy and powerful Hindoos, but for wealthy and powerful British merchants and bankers, and business possesses friends at court. It has been impossible to persuade the British to help the United States in its task of protecting its weaker brothers from the poison, alcohol, by honestly trying to suppress the contraband liquor traffic from off-shore British Colonies. It is evident that Mr. Chase is not very hopeful of his remedy. The squabble over this question at a recent session of the League of Nations shows how chimerical it is.

The real cause is a propensity toward the use of something to appease the craving of abnormal nervous systems. It is one phase of that degeneracy noted by students as imperilling our present Christian culture. By Christian culture I mean that state of society which grew lustily under the influence of the moral standards of Christianity, and which produced the loftiest type of man, collectively and individually, that history has recorded. Great students everywhere are recognizing the decline and are sounding the note of warning.

These things constitute a call for a new kind of revival that shall be deep enough to stir the foundations of our social structure. It must be deep enough to solve the economic unrest of the world. Only in two places has any new light appeared. These are the two spots, Spain and Canada, where the so-called Catholic Syndicates have sprouted, with some hope of spreading into mighty trees of comfort.

The narcotic habit is but one manifestation of a condition that imperils mankind in nearly every one of the political groups involved in the economic cycle of the Christian world. There may be many accessory conditions to be regulated before the true answer to the call for our daily bread is found. The shouting for reform, and the mad turmoil that disturbs the world, are due precisely to the lack of adequate supplies for human needs, attainable by men in every station and degree of industrial and intellectual development.

The problem must be viewed in the large and not merely microscopically through a tube. It necessitates a clear vision of the fundamental difficulty, so that remedial measures may be taken in the light of a broad understanding of what is wrong in the world. As I stated in my original article on the narcotic difficulty, no more than the periphery of the subject had there been touched. This much is certain, to come specifically to that one phase of degeneracy, an awakened consciousness that somethings needs to be done here at home, by and among ourselves, rather than to blame George for it, will go far toward making the American people as immune to the opium infection as the Chinese, who cut down the consumption 90 per cent in a few short years, with the unabated British-Indian production seeking by every device to reach and hold its former customers.

COURTENAY DE KALB.

WHAT LITERATURE HAS HE FOUND?

MR. C. D. WALLACE, president of the Barbour County High School of Clio, Alabama, in discontinuing a subscription made by his predecessor for the library of the high school, writes, "We can find literature better suited for boys and girls of rural sections."

Perhaps President Wallace is correct, but we wonder what literature he can find that is better for the boys and girls of rural Alabama, or of any other part of the South, than that literature which tells them about the infinite possibilities of their own country; than literature which shows them what is being done in agricultural and industrial development of their section and what the men and women of the South are doing to bring agricultural and industrial prosperity to this region.

We wonder just what inspiring literature he can find more valuable to the boys and girls under his leadership, than that which is found in the writings of many experts who use the columns of the *MANUFACTURERS RECORD* to tell of the South's resources, of the South's progress in agriculture and in manufacture, and that tell of the South's advance in education, and of the betterment of its farm conditions.

But then, perhaps President Wallace has found, like many another principal has, that unless there is an inspiring knowledge on the part of the teacher to awaken the minds of the young to the glories of their own section, they will go on in darkness as to what their section is doing and what opportunities it offers for themselves in the years to come.

HELPING TO RELIEVE SHORTAGE OF SKILLED WORKERS.

SUCCESS of the San Antonio (Tex.) Trade School operated by the Open Shop Association of that city, was described in a recent issue of the *MANUFACTURERS RECORD*. Sidney E. Cornelius, manager of the Open Shop Association, writes the *MANUFACTURERS RECORD* that the brick school section of the Trade School has also met with considerable success. This department, he states, will release for work about nine apprentice bricklayers, capable of doing **remarkably fine work**, considering the short time they have been training.

ADVOCATING IMPROVEMENT OF SOUTHERN ATLANTIC WATERWAYS.

THE Atlantic Deeper Waterways Association, J. Hampton Moore, Philadelphia, president, has issued an official call for its sixteenth annual convention to be held at Norfolk, Va., November 13 to 16, 1923.

"Once again," says the call, "Congress has voted funds for waterways improvements to be carried out according to the recommendations of its official advisers, the Army Engineers, in preference to the manifestly inadequate allowances proposed by the Director of the Budget. Work is going forward in many parts of the country which would otherwise have been discontinued, and this means, not extravagance, but the avoidance of the great and useless waste which would have come about through abandonment or postponement on partially completed works heretofore approved. * * * In the South there is renewed activity along the waterways. * * * The connection from the North Carolina sounds to the Cape Fear River and Winyah Bay has not yet been definitely recommended for construction. Various links in the chain of the southern thoroughfares are calling for improvement. A settlement of the various problems that will open the way for better waterways down and across Florida is yet to be attained. And last, but by no means least, is the approval still to be secured for the essential connecting link in the whole system that we have advocated, that link which will join the northern and southern waterway system * * * the intra-coastal waterway across New Jersey that will connect the great ports of New York and Philadelphia."

Referring to the fact that Norfolk "is fast becoming one of the world's great gateways," the call says further:

"Contributing materially to the strong position of Norfolk is the service of the inland waterways toward which our own work has been devoted. A completed link in the intra-coastal waterway now connects Norfolk harbor with the sounds of North Carolina and is being pushed on south towards Beaufort Inlet under continuing appropriations by Congress. To the north the work of modernizing the Chesapeake & Delaware Canal will soon give better transportation service to Wilmington, Philadelphia and Trenton. Of the advantages already provided by nature in Chesapeake Bay and Hampton Roads with their hundreds of miles of communicating, navigable waterways, what can be adequately said? Here indeed is a very nerve center of the nation."

ONE OF MR. McADOO'S GREAT BLUNDERS.

DR. CHARLES H. HERTY, formerly of North Carolina, but now of the Nation, in this week's issue justly denounces the great blunder of Mr. McAdoo when as railroad administrator he disbanded the industrial departments of the railroads of the South in a mistaken idea of economy during the war. These railroad industrial bureaus had been engaged for twenty-five years or more in investigating the industrial and chemical resources of the South; their work was preeminently important for war activities, but though this fact was aggressively pushed upon Mr. McAdoo by the *MANUFACTURERS RECORD* and others he blindly disbanded these organizations to the very great loss of the nation and especially of the South.

Dr. Herty, the former president of the American Chemical Society, and now president of the Synthetic Organic Chemical Manufacturers Association, points out in this issue the magnitude of Mr. McAdoo's blunder in thus halting the development of the chemical resources of the South. What he now says is directly in harmony with what the *MANUFACTURERS RECORD* vigorously and persistently said when Mr. McAdoo made the first announcement of this mistaken policy of his.

A TEXAN'S COMMENDATION OF THE DALLAS FEDERAL RESERVE BANK, AND DENUNCIATION OF ITS CRITICS.

Hardwicke-Etter Company.

Sherman, Texas, Aug. 27.

Editor Manufacturers Record:

Last week's issue of the MANUFACTURERS RECORD carried an outside editorial commending the Dallas Federal Reserve Bank for a certain liberal ruling concerning 'farmers' paper and the renewal thereof in the hands of its member banks.

I think it well to call your attention to the fact that this ruling is by no means a new one, at least in this district. I think it also well to say that within my knowledge, which is fairly extensive and accurate, no Federal Reserve member bank in this district has ever refused to renew farmers' paper if there was good and sufficient collateral to support it. Sometimes it is true that renewals have been refused even with sufficient collateral; but very seldom, in fact, never within my knowledge, has the farmer or those dependent on the farmer, suffered from this cause. Collateral, as you are well aware, is not the only factor that enters into a loan.

I have, it is true, heard a great deal of yelling and howling from certain gentry because of inability to float a renewal loan, or make a new one, but in the case of agricultural products these howlers have been speculators trading on the farmers' misfortunes and necessities.

I have heard a lot of it too from oil promoters and it is probably comforting to a great many people outside of Texas to know that Texas courts have recently provided free board and lodging for a number of these gentry over a term of years.

Ninety-nine per cent of the criticism that I have heard of the Federal Reserve System in this district has come from speculators and promoters. The other one per cent has come from men, honest in their opinion but swept off their feet by the innuendoes and biased charges of those who have had their schemes defeated. Take the spectacular drop in the price of cotton, which occurred in 1920 and during the two years which followed which was probably the most direfully distressing period the agricultural interests in this section ever passed through. Cotton, for instance, as collateral, shrunk in value like a German mark, yet at no time, I believe, was any legitimate farmers' loan ever refused if he had sufficient collateral and in many cases the farmer's own honor, integrity and industry were considered by the bank making the loan as better collateral than his cotton warehouse receipts.

I doubtless should apologize for taking so much of your time with a letter like this, but I have known you as a right valiant critic of the Federal Reserve System and at times a severe and merciless critic of some of its measures and the men who put them into effect. I regard you as the ablest and most upright critic of the system in the United States. I pay little attention to the opportunist politicians both great and small all over the country, who thinking to make a temporary advantage for themselves unscrupulously make untruthful statements, perhaps not knowing and certainly not caring for the result of those statements beyond the petty benefit which they think they can secure for themselves. But this is not the case with the things which you write and say and though I seldom agree with you I always give your articles special consideration and it has always been a matter of regret to me that you apparently had to be classed with the yapping crowd who pervert your arguments for purposes of their own.

This is not intended as a defense of the Federal Reserve System nor as a petty, though somewhat strained, compliment to yourself, but I am glad that something happens occasionally to excite your admiration and I am especially glad that it happened in the Texas district and thrice glad that the policy which brought your commendation has been the regular policy of the Bank in this district.

JAMES BIGGS.

Mr. Biggs, judging by his letter, evidently knows very little about the actions of the Federal Reserve Board and its definite, determined breaking down of prices by forcing the calling of loans. He has evidently not read the official statement issued by a number of Federal Reserve banks and the Federal Reserve Board emphasizing the necessity of restricting credit. Nor does he seem to know that many of the foremost bankers of the country have

repeatedly through the MANUFACTURERS RECORD and in other publications scathingly denounced the actions of the Federal Reserve Board in this campaign of deflation.

He is apparently also ignorant of the fact that men like Professor Gustav Cassel, and others of equal standing, attributed much of the world's breakdown of prosperity to the deflation campaign of the Federal Reserve System. Nor does he seem to know that Moreton Frewen, one of the leading economists of England, wrote the MANUFACTURERS RECORD, "How long will the 'gun play' of the Federal Reserve Board against business be permitted to continue? Its deflation policy has well nigh bankrupted the universe."

If the policy which is now being pursued by the Dallas Federal Reserve Bank is the policy which it has always pursued it is entirely different from that which was pursued by other Federal Reserve Banks, some of which did their utmost to break down state banks to such an extent that the Supreme Court of the United States denounced these actions and called them "warfare upon state institutions."

Mr. Biggs' designation of those who opposed the action of the Federal Reserve System as the "yapping crowd," must include such men as President Harding, who was strongly opposed to this deflation policy and reversed it, Professor Cassel, Moreton Frewen, former Governor Stokes, of New Jersey, president of the Mechanics National Bank of Trenton, Andrew J. Frame, chairman of the Waukesha, Wis., National Bank, widely known as one of the foremost bankers of America, Joel Hurt, a well-known millionaire banker of Atlanta, and hundreds of other bankers equally as well known, while others frankly admitted that they were afraid to incur the hostility of the Federal Reserve Board; and one of them, regretting that he could not give the MANUFACTURERS RECORD the privilege of publishing his letter of condemnation of the Board, said: "You do not know the power of that bunch."

Mr. Biggs seems to be a little sarcastic in his reference to the MANUFACTURERS RECORD finding something to commend. It has commended things without number. It has commended honor and integrity and the observance of law and order. It has commended prohibition. It has commended a protective tariff. It has commended the work of people everywhere who are seeking to build up the South, and build up the nation. But when a policy so diabolical in effect as that of the Federal Reserve System under its former management wrecks the prosperity of millions of people, this paper never hesitates to express its opinion on the subject.

There are many people in Texas who could enlighten Mr. Biggs to a very large extent on things which they know and of which he is apparently in entire ignorance, in regard to the operations of the Federal Reserve System under its former management. We hope some of them, including Judge Armstrong, of Fort Worth; W. Y. Yeary, of the Agricultural Department of Texas, and others, will do so.

NEEDED TO STRENGTHEN HIS BACKBONE.

MR. A. C. LOVE, of a mining and mill equipment company, of Huntington, W. Va., in renewing his subscription to the MANUFACTURERS RECORD, writes:

"I take fresh inspiration and courage on reading each issue and it is a great comfort to know that you are not afraid to publish your sentiments, which agree almost invariably with mine, and I believe, most right-thinking people.

"Some of us weak sisters who have a hard time trying to make both ends meet, do not always have the time (and I fear the courage) to express ourselves as often and boldly as we should for the rigid enforcement of law and order and the upbuilding of the material, moral and educational forces of our country.

"Sometimes, I catch myself reasoning 'Oh, well, the people

of this country have always been able to meet any emergency, why should I worry,' etc., but it is this very feeling of complacency that will get us unless we watch out.

"I need the MANUFACTURERS RECORD once a week, and it usually comes at about the right time at the end of the week when resistance is getting pretty low."

Never, we believe, was there greater need of moral backbone in the people of this country than at the present time. There seems to be a determination on the part of the Interstate Commerce Commission and the Federal Reserve Board to assume autocratic powers which were never intended by Congress. What these two organizations are doing only indicates what other commissions and bureaus in Washington are doing. One by one they are undertaking to absorb the control of all business interests and to destroy the spirit of initiative and self-reliance on the part of our people.

The time has come to call the people of this country to the serious consideration of all these problems. Without fear or favor, without regard to friend or enemy, the MANUFACTURERS RECORD in the future, as in the past, will express its opinion without political bias of any kind. It expects to make many enemies in the future as it has in the past, but the work to which it is committed is for the good of the whole country. It may make mistakes; at least it lays no claim to infallibility, but it does claim to be absolutely unbiased in the views which it expresses in regard to economic, business and governmental matters. It is constantly vigorously criticising the actions of some of its warmest personal friends in these government organizations. Some of these men are broad enough to appreciate an honest statement of an honest conviction. Some become its bitterest enemies, but it proposes to go straight on, hitting wherever it believes the blow should be delivered, letting the chips fall where they may.

Those who believe in that kind of a paper, who want the truth as God gives this paper the power to see it and the strength to express, are invited to become subscribers. There are many who do not want that kind of a paper, for they hate to be told the truth and are not willing to know the facts. They need the paper more than anyone else, but we can do without their subscriptions very much better than they can do without a fearless presentation of the truth.

PROTECTION ESSENTIAL TO THE PROSPERITY OF THE NATION AS SEEN BY PRESIDENT BARNES OF THE UNITED STATES CHAMBER OF COMMERCE.

IN a recent address before the Chamber of Commerce of Des Moines, Iowa, Julius H. Barnes, President of the Chamber of Commerce of the United States, disclaiming any political coloring whatever, spoke of the national policy of protection and declared that this national policy was operating actually to protect American farm prices. Mr. Barnes stated that except for the import duty on corn, the Atlantic seaboard today would be supplied by the Argentine; that except for the import duty on wheat, the spring wheat millers of Minneapolis and Buffalo markets would be using Canadian wheat, which for fall delivery represents a price twenty cents under the American basis for similar quantities, protected by the thirty cent duty.

Mr. Barnes then pointed out that the American national policy had been firmly established as one of protection—not only the protection of an import duty against the competition of foreign goods, but the protection by immigration and contract labor laws against the influx of cheaper foreign labor, inured to lower living standards and fewer wants than our people had been schooled to expect.

In discussing the situation in Iowa, Mr. Barnes stressed the importance of that state as a typical agricultural state of the Union, dependent, perhaps, less than any of the

other states, on the manufacturing industry. He called attention to its few industrial centers and its large annual production of agricultural wealth of \$750,000,000. He spoke of the improvement in American farm position and farm prospects which had taken place in the last few weeks, and said that hogs had advanced from a low Chicago price of \$7.05 per 100 pounds in June to the price of over \$9 at the time he spoke and that standard winter wheats in the Chicago market had advanced from a low of \$.97 in June to \$1.07; that standard corn was then selling in the Chicago market at ninety cents, and even the very large crop of new corn in sight was apparently assured of a basis approximately seventy cents; whereas two years ago the Chicago fall price reached a low of 42 cents.

The statements of Mr. Barnes need to be emphasized and reiterated. The time will come, and we hope at no distant date, when the farmers of the South as well as of the North and West will have a full realization of the fact that only under a policy of protection for both agricultural and industrial interests is it possible for the South and for the Nation to reach and maintain the highest degree of prosperity.

SOUTH TODAY VERY ACTIVE IN INDUSTRIAL DEVELOPMENT AND IN BUILDING.

EVERY mail brings to the office of the MANUFACTURERS RECORD additional evidence of the wide-spread activity in the South in industrial operations and in other building developments. Figures published elsewhere in this issue show that the total number of items on construction and other development activities in the South for the first eight months of this year break the record for any similar period since 1916. Here is unmistakable evidence of the business activity and the general prosperous conditions of this section.

In this respect the South appears in an even more favorable light when contrasted with some other parts of the country. In the report of August building permits just issued by S. W. Straus & Co., of New York the South showed a gain of 17.6 per cent over August, 1922 and a gain of 32 per cent over July. The Eastern states showed a gain of 7.25 per cent over August a year ago and a loss of 1.87 per cent from July. In the Central states, there was no material change in August this year as compared with August last year but there was a loss of 2.5 per cent from July.

Emphasizing the favorable position enjoyed by the South today from the standpoint of those who are seeking new business in this section is the following letter from an important industrial concern of Baltimore:

Chesapeake Iron Works,
Baltimore, Md., September 7.

Editor Manufacturers Record:

Complying with your suggestion that we advise you regarding the industrial condition in the South at present as we find it, we are more than pleased to state that our experience is that the South is probably doing more construction work relatively than the balance of the territory in which we ordinarily secure business.

During the month of August we did a most healthy business, the character of orders being very desirable, consisting of steel work for warehouses, institutions, as well as public work.

We also find quite an expansion in the paper manufacturing in the South as is evidenced by the fact that we have recently received orders for cranes from two concerns in the far South.

It occurred to us that this information might be encouraging, inasmuch as you have done, in our opinion, more than all of the other publications combined, to focus people of this country on the wonderful advantages of the South.

F. S. CHAVANNES, President.

"KEEP AMERICA AMERICAN."

ONE of the most strikingly patriotic articles, yet at the same time calculatingly logical in presentation of cold hard facts on the immigration question, appeared in a recent issue of the Saturday Evening Post under the title, "Americans On Guard," by the Rev. William T. Ellis.

Mr. Ellis described particularly conditions at Constantinople and the character of the classes of Russian refugees awaiting a chance to emigrate to America. He pictured the burning zeal and patriotism of the little group of Americans there, "who simply could no longer endure sitting idly by watching streams of undesirable emigrants pouring into the United States from this center of Asiatic unrest," and who banded themselves together in a sort of unofficial court of inquiry, and for weeks at their own time and expense, passed upon every applicant for admission to the United States.

Mr. Ellis states that: "Whatever Yankee shrewdness and efficiency and patriotic zeal can lawfully do is being done to purify the stream of emigration from this point of peril.

"The greatest single present force for world stability and world peace is the United States of America. Once let it become denatured and denationalized by the dominance of alien and un-American ideas and the jig is up for the family of nations. Our folks at home simply do not understand the state of the Old World and how real the existing menace to civilization is. Therefore, they let the sentimentalists and special interests follow a course that saps the very foundations of our country.

"If America understood, as clearly as does the Soviet representative who works out his schemes in the cafes of Constantinople, that it is through Ellis Island and the other gates of immigration that the revolutionary forces must enter the country, then these gates would be shut absolutely, and as quickly as Congress could act. I learned more than a little, here on the banks of the Bosphorus, of schemes for smuggling drugs and drink into America; and of the social vices that spread from this focus to all the world; but these disturbed me not at all as compared with the evidence that from this central spot, by a variety of methods and from assorted motives, a stream of unassimilable life utterly alien to all American ideals is being directed toward the United States.

"It is not merely to save America herself that we should fly the flag. Keep America American, but primarily in order to save an imperiled civilization. When I left the States there was a terrific hullabaloo being raised, especially in religious circles, to force America both to intervene in Turkey and also to open her gates to admit Christian refugees from Asia Minor, Greeks and Armenians. Naturally, I expected to find the fountainhead of this propaganda in the headquarters of the relief agencies out here, where the urgency of the case is best understood. Instead, in talking over the matter with the officials of highest responsibility at the headquarters of the Americans in charge of the refugees and the orphans, I found them ardent advocates of a stricter immigration policy. They are utterly opposed to dumping these people who are in their care into America. They see the real menace involved in the unassimilability of these Asiatic refugees. 'What I can't understand,' said the chief of the American Relief workers, 'is why our country did not shut the gates twenty years ago.'

"One educated American out here argues, on the basis of some expert sociological report he has read, that if we had long ago debarred the aliens of Eastern and Southern Europe, and of Asia, the population of the United States would be quite as great as it is today, with all citizens of the historic American type; and that there would be no dearth of men to do the physical labor; for the old American notions respecting hard work would not have been altered by the European invasion.

"The way in which these Americans abroad debate and discuss the country's problems is really affecting. Patriotism is a passion with these expatriates. Times without number, in many parts of the world, when a traveler recently from the homeland has yielded to the invitation to tell groups of Americans about conditions in the States, I have heard them, with tears in their eyes, cheer fervently for the old land and flag. To them there is a definite meaning in the historic and spiritual significance of the United States.

"From afar they have caught a vision of the genius of the country and of the importance of its preservation.

"Bluntly stated, the immigrationists put other considera-

tions ahead of the interests of America. Those societies that promote emigration to the States cannot be expected to look at the subject from the America viewpoint; their interest is quite otherwise.

"A Middle West politician was recently in Constantinople, at the expense of the Near East Relief. He took occasion, immediately upon his arrival to make a plea for immigration before the American Luncheon Club, on the ground of the shortage of labor in America. He may have wondered why his burning words fell so cold upon his listeners' ears. Had he been better acquainted with these Americans he would have known that all of them have matured convictions upon this subject. Out here these independent Yankees are even guilty of the lese majeste of suggesting that there is a large army of idle politicians in America who could profitably be employed on the farms, in the mines and in the mills.

"From this distance we look upon the myriads of white-collar parasites, the nonproducers who are selling stocks and bonds, the youths who are doing women's work in stores and offices, and the lounge lizards and the vitiated habits of cabarets and dance halls and street corners, and we dare to believe that they and the country would be bettered if they could all learn the old-fashioned American ideals of the dignity of labor.

"It is not a shortage of man power that ails America, but a misapplication of our present abundant supply."

A WISE EXAMPLE TO FOLLOW.

G. L. Miller and Company

Atlanta—Philadelphia—St. Louis—Knoxville—Memphis

New York, August 22.

Editor Manufacturers Record:

Since writing you on the 18th expressing our admiration of the contents and editorial policy of the Manufacturers Record, we have been discussing the benefits which our Sales Department has received from reading your publication. Without exception, our salesmen have expressed the highest appreciation of the Manufacturers Record as a source of inspiration in their work and as a mine of data with which to acquaint the investors on whom they call regarding the development and progress of the South. We find that the three or four copies which are now circulating in our offices each week are in great demand by the salesmen and in order to place the Manufacturers Record at the disposal of as many as possible of our large sales force, we have decided to enter a six months' subscription for 25 copies of each issue of your publication.

Please send these copies in one package to the New York office. Our plan is to go through them carefully and red pencil the articles which we think will be of interest and help to the salesmen. We will then pass them on and we feel sure that this will be a most vital contribution to the education, not only of our sales force but of our customers and investors generally which we could make.

Perhaps this use of the Manufacturers Record is not a new one to you, but it strikes us that there are literally hundreds of firms which might well follow this same plan. For surely by pursuing this course we are making direct contribution to results in sales and we feel that the investment which we made in these subscriptions will bring us back returns of gratifying size.

Willard C. Wheeler, Advertising Manager.

"Go thou and do likewise" might be said to hundreds and indeed to thousands of business concerns throughout the South and to business men in the North and West, seeking to do business in the South.

The experience of G. L. Miller and Company in educating their salesmen through a study of the MANUFACTURERS RECORD to the limitless possibilities of the South in order to give them talking points in selling securities to investors in the South and in the North and West, as well as in foreign lands, might be followed to good advantage and to great profit by many others.

PROPOSED FREIGHT RATES ON BRICK, ETC. SUSPENDED.

REFERRING to the action of the Interstate Commerce Commission in suspending until December 13 the freight tariffs proposed on brick and clay products by the carriers for the Southern territory, John W. Sibley, chairman of the Southern Brick & Tile Manufacturers' Association, Birmingham, Ala., says in a letter to the MANUFACTURERS RECORD that the petition of these manufacturers, "representing practically all of the tonnage moving on interstate shipments," showed that the proposed rates would produce an increase in revenues to the carriers of 25 per cent and over, in the face of the previous order of the Commission that "preservation of existing revenues should be the guiding rule in establishing rates in the Southern territory."

Furthermore, he says that they "also cited the statement of the Bureau of Railway Economics that the earnings of Southern carriers for the year ending May 31, 1923 were at a rate of 6.79 per cent on their tentative valuation, or 1.1 per cent better than the average return for a like period of all Class 1 railroads in the United States. Consequently, this is no time for raising freight rates on such an important item of building construction."

Continuing Mr. Sibley asserts that the proposed freight tariffs would add hundreds of thousands of dollars to the cost of building construction and paving in the South. To Florida they would be especially unjust. Besides, the proposed rates would adversely affect established brick plants whose locations were chosen upon the good faith that certain plant rates and relationships both of points of origin and destination would be preserved, and the result would be crippling of the plants and some would be broken up.

"Conditions in the South and its development are unique," comments Mr. Sibley, "and the same yardstick for the densely populated North or Middle West, where some counties have more brick plants than many states in the South, cannot be applied to Southern territory."

"We appreciate," he says in conclusion "the co-operation of the MANUFACTURERS RECORD in its constant efforts for the welfare of the nation and its repeated editorials in recent months against any increase in freight rates, but rather urging voluntary reductions by the carriers as an act of justice and sound judgment, as it would result in great benefits to the carriers themselves."

The Southern Pine Association, New Orleans, La., also reports favorable action by the Commission against an increase of rates on lumber. It says that a decisive victory was registered when the Interstate Commerce Commission on August 28 directed the cancellation of schedules proposed by railroads in the Southeast which would have materially increased the freight rates on many lumber shipments destined for points beyond the Ohio and the Mississippi rivers. The increases were originally proposed to be effective April 28 last but they were suspended until September 25 and now they have been abandoned. A. G. T. Moore and Charles L. Cotterill represented the Southern Pine Association and the Southern Traffic League before the Commission.

"By the proposed schedules," says the Association, "the carriers planned to restrict the application of the so-called Jones combination rule for constructing lumber rates from the Mississippi valley and Southeastern points of origin to Ohio and Mississippi river crossings when the shipments were destined for beyond these crossings, which would have restricted the rule to movements where no through rates were in effect via any route."

"Under the combination rule, shippers of lumber from the South have been able to forward many shipments by routes which gave the effect of lower rates than the through rates published between origin and destination. The organizations protesting against the change in the application of the Jones

rule contended that the entire rate structure of lumber shipments from the South is being reconstructed and that these schedules were an effort on the part of the carriers to install higher rates before this study was completed.

"Lumbermen who have followed this case closely feel that, aside from its intrinsic value to the industry, it represents a considerable moral victory. The hope has been expressed that as a result, the carriers will hereafter desist from using strategic and indirect methods of increasing rates."

PUSHING THE HOMESEEKERS' RATES MATTER HOME TO THE RAILROADS.

A LETTER has been sent to the presidents of the railroads whose lines serve the southeastern states, by the Georgia Real Estate Association, H. Clay Murphey, president, Macon, Ga., urging them to establish homeseekers' rates which have not been restored in this section since the World War, although the west and the southwest have them. As pointed out by the MANUFACTURERS RECORD the railroads are missing their opportunities in not re-establishing these rates and also in not advertising the South in the liberal way that the West and the Southwest and the Pacific Coast railroads advertise their respective regions, the splendid results of which are visible everywhere.

There are some pungent sentences in the letter of the Georgia Real Estate Association, which is working hand in hand with the National Real Estate Association to have these rates restored. For instance:

"The railroads of this country moved 5,000,000 people out of the South following the Civil War, due to bad economic conditions, and by advertising the opportunities of the Middle West and the far West—*always* the land of the setting sun. Today that condition is reversed. The bad economic conditions (agriculturally) are in the West, with serious overproduction of wheat, large debts and high priced lands. Their people are looking to the opportunities of the Southeast where every advantage of soil, climate, values and living conditions exist,—free from blizzards, and free at last from a one-crop slavery. The best and the last of the cheap lands are in the South. The large plantations, never before available, are now offered for sale to the man in this country who is looking for real opportunity."

"Many negroes have migrated because they cannot farm cotton against the boll weevil. The intelligent white farmer, practicing diversification, is getting independent. For every negro family that has left us many small white farmers could be brought in and adapted to a successful farming program. * * *

"What will the railroads of the South do to assist? We need leaders as never before—men of vision, courage and action. They are doing much, but we do not believe they have as yet fully realized the extent of the opportunity of today when everyone is looking southward—* * *

"Every section of the United States has homeseekers' rates except the Southeast. It is easier to move out of the South and harder to move into it than to any other section of the country. Extensive advertising and homeseekers' rates on the part of the railroads can do much to develop the South."

Mr. Murphey's assertion that it is easier to move out of the South and harder to move into it than any other section embodies a strong arraignment of the railroads for their neglect to restore homeseekers' rates and it ought to spur them to action in the manner desired if nothing else will do so. The plea of the lines that in the past commercial travelers took advantage of such rates, although they were not entitled to them, and thus caused the companies to lose fares which they ought to have received, is in vain, for the railroads could attach such provisions to tickets issued at homeseekers' rates that none could purchase them to advantage, excepting they were bonafide prospective settlers. In other words, the railroads which make such a claim show their incompetence to deal with a few dishonest men and thus they use this as an excuse to make a whole section suffer—Bah!

Education in Chemistry a Vital Factor in the Development of the Wealth of the South.

THE PROBLEM OF SUITABLE LABOR MUST ALSO RECEIVE THE UNITED ATTENTION OF ALL SOUTHERN INDUSTRIAL AND COMMERCIAL INTERESTS.

By CHAS. H. HERTY, President, Synthetic Organic Chemical Manufacturers Association.

It is good to know that the convictions of the MANUFACTURERS RECORD are just as strong as ever that through the door marked CHEMISTRY lies the way to vastly increased wealth for the South. This I gather from your request for an article on this subject for your Chemical Exposition Number, which carries me back to the mid-summer days of 1916, when you were preparing that remarkable issue of your journal which has become practically a classic on the subject of the development of the natural resources of the South through chemistry. Unfortunately, the necessities of my work during the past few years have taken me away from the close contact with conditions in the South that I once had, and so I am not in position to send you an article along exactly these lines. There are two thoughts, however, which may be worthy of record, the one bearing on education, the other on the present labor situation in the South.

I do not speak of education from the conventional point of view. I am thinking not so much of the courses given in our colleges for the training of our future citizens, but of that more difficult task of educating those who have long since left the collegiate atmosphere, have reached high positions, and now determine the policies which affect for better or for worse the future of our country. I refer particularly to the failure to educate properly a good Southerner, Mr. William G. McAdoo, the former Secretary of the Treasury and, more particularly for the purposes of this story, the former Director-General of the U. S. Railroad Administration.

Mr. McAdoo may not fancy my speaking of his lack of education, but I am confident that if at the time the railroads were taken over by the Government he had understood the important bearing of chemistry on the development of natural resources he never would have wiped out with one decision the fine work done by many of the railroads of the South in utilizing the chemist in developing the natural resources along their several lines. I do not hold this against Mr. McAdoo personally, for I am confident that in taking this action he was prompted by the highest motives for the national good and by the belief that he was effecting a rational economy which the war-time needs of the nation demanded. It is unfortunate, however, that he grew up in a period when there was little attention paid to chemistry in the colleges of the South and little understanding among the business men of the South of the potentialities of chemistry in industrial development.

Consequently when the whole energies of the nation were bent on sending men and supplies to the battlefields of France, and this feature of the railway administration was presented to Mr. McAdoo, he did not recognize the difference between the constructive work of the chemist who was trying to convert the nation's natural resources into their most useful form, and the activities of other industrial agents of the railroads, immigration agents, for example, whose work could readily be spared during war-time conditions. The fault was not with Mr. McAdoo, but rather with his environment. It had not been suffused with the importance of chemistry in relation to the national welfare. The one agency which has done more in the last few years than probably all others to promote education along these lines in the body politic is the Chemical Foundation. It is a long job to educate over a hundred million people, but if the plans

of the President and officers of the Chemical Foundation carry through, that work will eventually be accomplished and the nation will be all the richer for it.

Happily all was not lost through this unfortunate episode of the war period, for my good friend, J. M. Mallory, Industrial Agent of the Central of Georgia Railway, saw the vision so completely that nothing could shake his faith. He has persisted along the lines begun in those earlier years, and I understand is bringing to this year's Chemical Exposition a fine exhibit of Georgia clays whose potential value has been greatly increased through just that kind of work which lies at the base of real intelligent development of natural resources. But the major part of the momentum gained in 1916 and 1917 was lost through Mr. McAdoo's decree, and there is real hard work ahead if it is to be regained. In that good work I know the MANUFACTURERS RECORD will do its part.

There is another side of the story which furnishes a compelling argument for the development of the chemical industries in the South, and that is the labor situation. As I read the reports from "down home" two striking facts stand out in the labor situation of today. First, the tremendous development of the cotton mill industry. It is difficult for one who has not traveled through the Piedmont section of North Carolina, South Carolina and Georgia to understand how great this development is. It amazes everyone to learn, for instance, that North Carolina today has more spindles than Massachusetts, yet the labor for all of these mills has been recruited from among the natives. It is fortunate for the soundness of the general economic conditions of the South that a determined stand is being made against the importation of foreign labor for the operation of the new mills now going up, and frequently built up by New England capital. Naturally there is a limit to the supply of such labor, and that limit is being gradually approached. Second, a portion of the negro labor is finding its way to the North, whether wisely or unwisely only the future can tell. Therefore, in thinking out lines of future industrial development, the labor factor must be taken seriously into consideration.

Now the chemical industry is essentially an industry requiring a minimum of human labor, and especially, of common labor. Trained technical men and scientifically controlled machinery do the greater part of the work. With a method once thoroughly worked out, enlargement of a plant frequently means only increasing the number of units of plant machinery without any corresponding increase in the operative labor required. It seems to me that this thought is one which deserves the most careful consideration by the industrial leaders of the South who are looking forward to the days of greatest prosperity. Diversified industry is just as important as diversified agriculture.

Now may I venture a word of suggestion to my good friends and colleagues among the chemists in the South? While the financing of chemical enterprises lies with the business men, the initiative lies with the chemists. Would it not be helpful in this situation if through the joint action of such bodies as the chemists of Georgia sympathetically supported by the Atlanta Chamber of Commerce, or the chemists of Louisiana, co-operating in the same way with the

New Orleans Chamber of Commerce, there should be assembled representative chemists and business men from all portions of the South, for the purpose of serious discussion of facts gathered in advance, and of rational planning how to make those facts count in a real industrial advance. I believe that only good—and much good—would eventually result from such a gathering.

In conclusion, I know you share with me gratification over the continued advance of the American chemical industry. It is making steady progress toward stabilization, and has won at last the full confidence of the American people, despite the persistent efforts of those who would break it down. Conscious of the great responsibility placed upon it by the nation, that responsibility is, I believe, being worthily met. The industry stands today as a definite guarantee of economic independence and a powerful reserve for national defense.

Central of Georgia Exhibit to Show Mineral Resources of Georgia and Alabama.

The exhibit of the Central of Georgia Railway Company, Industrial Department, at the National Exposition of Chemical Industries, New York City, September 17-22, will occupy Booths 289, 290, 291 and 292.

The exhibit attempts to show by samples and descriptive literature including maps, particularly the undeveloped, but to a large extent the developed mineral resources of Georgia and Alabama tributary to the railway.

The exhibit will also contain samples illustrating the naval stores industries, using the distillation of turpentine and the manufacture of rosin from pine tree gum. It will also carry an exhibit of pine oils, creosote, charcoal, etcetera, obtained from the distillation of pitch pine stumps, tops, and other refuse by the retort method.

The manufacture of paper and pulp from pine wood will be demonstrated beginning with the wood itself and continuing through to the finished product.

In the mineral exhibit special emphasis will be given to bauxite and the several varieties of clay, including common brick and building tile clay, fire clay of the coal measures, kaolin clay, both primary and sedimentary, and the high duty refractory clays of the Coastal Plain.

The exhibit will carry 41 mineral samples as follows:

Aplite	Kaolin (Primary & Sedimentary)
Asbestos	Limestone
Bauxite	Marble
Barytes	Magnetite
Chalcedony	Manganese
Chert	Mica
Brick and Tile Clay	Ocher
Fire Clay	Onyx
Pipe Clay	Ornamental Building Stone
Refractory Clay	Pyrite
Coal	Quartz
Corundum	Quartzite
Feldspar	Rutile
Flint	Sand
Fullers Earth	Sap Brown
Gold	Silica
Granite	Slate
Graphite	Soapstone
Halloysite	Talc
Iron Ore	Shale

Several of these minerals such as coal, clay, marble, iron ore, limestone, etcetera, will carry specimens representing the several varieties of these minerals.

The exhibit will contain in many instances, but more particularly the kaolin and refractory clays, articles manufactured in the process of research work conducted by the Central of Georgia Railway Company in co-operation with the United States Bureau of Mines.

These features begin with the raw products and extend through the stages of refining, manufacture, both laboratory and under plant conditions and illustrate the tests of materials under actual plant practice.

There will be for distribution literature including maps describing the location of the deposits from which the minerals were taken and official bulletins of the Bureau of Mines describing the methods of refining, manufacture and plant tests.

There will be in attendance at the booths the following representatives of the railway company:

J. M. Mallory, General Industrial Agent; R. T. Stull, Assistant General Industrial Agent, formerly Chief Ceramist, U. S. Bureau of Mines, and Past President, American Ceramic Society; T. Poole Maynard, Ph. D., Geologist, Central of Georgia Railway Co., formerly Assistant Geologist, Georgia Geological Survey, and formerly connected with the U. S. Geological Survey and the State Survey of Maryland; Charles B. Niehaus, C. E., Real Estate Engineer, Central of Georgia Railway Company.

Southern Railway Exhibit at the Chemical Exposition.

Comprehensive as have been the exhibits of the mineral resources of the South heretofore, the exhibit by the Southern Railway System at the Ninth National Exposition of Chemical Industries, Grand Central Palace, New York, the week of September 17, will surpass in many respects the exhibits which this railway system has made in former years.

It will be particularly complete in kaolins and clays and all of the raw materials of the ceramic industries. In this connection an important feature of the exhibit will consist of a complete line of electrical porcelains manufactured at Knoxville and illustrating the advantages of locating ceramic industries in close proximity to raw materials and fuel. There will also be shown clays suitable for the textile and paper manufacturing trades and for making brick and tile of all descriptions.

For paint manufacturers complete displays will be made of a large variety of pigment materials, talc, calcite and barytes.

Other interesting features of the exhibit will include displays of marbles, granites, iron, copper, lead, tin, zinc, nickel and gold ores, and refractory materials, including a new refractory cement of great promise.

Completing \$2,000,000 Pipeline from Monroe to Alexandria.

Alexandria, La., September 8—[Special.]—Rapid progress is being made on the \$2,000,000 gas pipeline which is being constructed from Monroe to Alexandria, a distance of about 100 miles, by the Southern Carbon Co. of Monroe. The Hope Engineering & Supply Co. of Mount Vernon, Ohio, is the contractor and three gangs of engineers, surveyors, mechanics, with skilled and common labor, working in shifts of eight hours each, and distributed between Alexandria and Swartz, near Monroe, have virtually completed the pipeline, which will supply Alexandria and its suburbs with natural gas.

Reviewing the work of these gangs and the three ditching machines cutting their way through farm lands, wooded sections, bayous and swamps, Col. Wm. Polk, representing the Southern Carbon Co. in Alexandria reports that \$750,000 has been expended for labor; and that the right of way has been paid for throughout the entire distance.

The pipeline, which is of steel, contains 325 carloads of pipe beside many carloads of couplings, rubber packing, etc. Approximately 400 barrels of paint were used on the pipe before it was laid in the trench. It will reach the river at Alexandria in the near future and will be connected to the gas mains of the City between September 20 and October 1. Maximum capacity of the line will be 17,000,000 cubic feet per day, of which Alexandria has contracted for 3,000,000 feet per day, for a period of ten years. This will allow an expansion of approximately 600 per cent for new industries, additional connections for present industries and domestic use, and for increased use as fuel for heating and power.

Connections with public institutions is being arranged for, including the following near Alexandria: Louisiana Hospital for Insane; U. S. Veterans Hospital No. 27; Home for Feeble-Minded, and Camp Beauregard Military Reservation.

The Chemical Industry in the South.

By CHARLES F. ROTH, Manager National Exposition of Chemical Industries.

The chemical industry of the United States has become great during the past ten years due primarily to two reasons. First, the war shut off European sources of supply and compelled America to manufacture her own chemicals or go without. Where the reason sufficiently strong did not exist before the war, partly because of the firmly entrenched idea that Germany only was the world's chemical factory, the outbreak of hostilities brought it very forcibly before American manufacturers as prices doubled overnight. In other words, the war practically forced America into the chemical business on a broad scale. Second, the enforced manufacture of chemicals hastened the ferreting out of raw material supplies and revealed the fact that the United States abounded with practically all the raw materials for the industry. Furthermore, the rapid growth of chemical production showed that the possibilities of the South in this field were perhaps greater, all told, than any other section of the country.

In 1915, 1916 and 1917, when the quest for resources for every industry was at its height, engineering surveys showed that millions of dollars lay dormant, in wartime or peace, in the unworked resources of the South. The war focused the eyes of the balance of chemical United States on the Southern states. The railroads took up the cry at first with the idea of developing the territory along their routes. Various chambers of commerce of different localities have put their shoulders to the wheel. Within five years, as a consequence, what was once considered a dream of the far distant future, has become a reality with startling rapidity. Particularly in chemical manufacturing, plants have sprung up all over the South, many of them since the end of the war, manufacturing everything from proprietary medicines to coal-tar distillates and sulphuric acid. The recent statement by one of America's leading chemical engineers that many species of Southern pine are suitable for wood alcohol distillation may bring this industry into the South, to help supply the ever-increasing demand for this material, in conjunction with the turpentine and rosin industries.

Just what progress has been made in the South in the production of chemicals and just what opportunities still exist for a further expansion of activities along this line will be shown at the annual Chemical Exposition, which opens on September 17 at the Grand Central Palace, New York. Raw materials and finished chemicals from Southern mines and plants will have their place along with the products from every section of the country. The unusual feature of the exhibits from the South, however, is that they will show perhaps a greater ratio of expansion in chemical production than any other section, although the South with the exception of sulphur and phosphates, has never been looked upon as a chemical producing region. From the initial exhibits of several of the railways of the South at the first Chemical Exposition back in 1915, the increasing number of chemical products covered in the exhibits each year has shown a remarkable growth.

In the Muscle Shoals district alone, the chemical industry of the South has a second Niagara Falls. That other opportunities for expansion along chemical lines still exist will be demonstrated by the Southern Railway, the Central of Georgia Railway and the Alabama Power Company in the exhibits at this year's Exposition. These companies have been and are drawing favorable attention to the resources of the South as well as its manufacturing opportunities. Two

of the South's big sulphur producers, wherein Louisiana and Texas lead the world—the Texas Gulf Sulphur Company and the Union Sulphur Company, will show their products.

Several new features have been added to the Exposition this year. A course in practical chemical engineering, a series of lectures by leading authorities in the field lasting throughout the week at the Grand Central Palace, has been planned for students studying chemistry at various American colleges. More than 200 students have already enrolled to take this intensive course which is under the general direction of Prof. W. T. Read of Yale University. Students during their stay in New York will be housed in the dormitories of Columbia University.

In addition to the educational work among the students, a series of educational exhibits showing the progress of American chemistry, have been planned. A completely equipped modern laboratory will be shown. New phases of chemical warfare and its application to the abolition of insect pests such as the boll weevil and army leaf worm have been planned to be shown. Seven distinct exhibits demonstrating the actual money value of chemical research in various lines of industry will feature a large exhibit under the auspices of the American Chemical Society in the educational group. The new revolutionary process for the refining of petroleum, the Dubbs Process of the Universal Oil Products Company, is a new feature of the Exposition this year which will invite inspection by the oil interests of the South.

Radio and wireless telephony in general, one of the rapid developments of the past year, will also be one of the new features of this year's Exposition. To show just what the chemical industry has done in the development of radio, a special exhibit for products of chemical origin and nature used in the radio, either directly or indirectly, has been planned. How the radio is finding uses for the rare metals of chemistry, rarely before getting into commerce on a broad scale, will be shown. New radio uses for thorium, tellurium, selenium, tantalum, molybdenum, and others, as well as carborundum crystals, synthetic resins such as bakelite, hard rubber parts, and numerous delicate electrical instruments, all with a chemical background, will be demonstrated.

The Technical Association of the Pulp and Paper Industries, which will hold its fall meeting again this year in conjunction with the Chemical Exposition in New York on September 20, has announced six speakers for the occasion.

T. L. Crossley "Pulp and Paper Magazine of Canada" will talk on the "Attitude of Men to Educational Opportunities to Study in Pulp and Paper Mills;" Hubb Bell, United States Testing Company, "The Standardization of Paper by Test;" N. W. Sultz, Research Corporation, "Application of the Cottrell Electrical Precipitator to the Pulp and Paper Industry;" J. H. MacMahon, Mathieson Alkali Works, "Preparation of Bleaching Liquors from Liquid Chlorine;" R. F. Bacon, Texas Gulf Sulphur Company, "The Mining of Sulphur;" James G. Vail, Philadelphia Quartz Company, "Silicate of Soda in the Paper Mill."

The American Ceramic Society is holding its fall meeting at the Exposition on September 19 and an attractive program is being prepared.

A comprehensive moving picture program, embracing about thirty of the latest industrial films and ranging from one to five reels each, will be run at the Exposition this year as upon previous occasions. A special auditorium for the purpose has been arranged in the Grand Central Palace. Chemical pictures, mining operations, steel plant operations, motor truck transportation, railroad transportation, fire clay refractories, water power, abrasive stone, talc mining, gold mining, the cotton industry, electrical power generation and use, sul-

phur production, asbestos, coal, nickel rolling and drawing, various phases of chemical warfare, uses of dynamite, production and users of insulin for the cure of diabetes, and others, represent the subjects which will be covered by the motion picture program. In addition, a moving picture studio, showing the actual taking and production of motion picture films, will form one of the educational exhibits at the Exposition.

In a nutshell, the Chemical Exposition has been planned this year as a great chemical and chemical equipment market place under a single roof as well as for the general education of the technical and lay public in things chemical, particularly new developments of the past year or two. With some four hundred manufacturers of chemical products, chemical equipment, and materials for the production or distribution of chemicals, it is believed that over a hundred thousand buyers of these products will attend the Exposition during the week of September 17 to view in one place the latest developments in these fields. The South will be well represented among the exhibitors, and it is probable that hundreds of buyers from below the Mason-Dixon Line will visit the Grand Central Palace to see what is being offered by and to the chemical world. The whole keynote of the Exposition will be to make contact between the seller and buyer, and the capitalist and the developer of new enterprises.

Alabama as a Field for Industrial Development to Be Emphasized by Exhibit of Alabama Power Company.

Opportunities which Alabama offers capital will be presented by the Alabama Power Company at the Ninth Exposition of Chemical Industries at the Grand Central Palace, New York, through an impressive exhibit of Alabama's industrial assets.

The Alabama Power Company exhibit is planned on the theory that the prospective manufacturer wants certain definite data on the state's resources, raw material, transportation, power, fuel, climate, labor supply, manufacturing costs and living conditions—and that he wants this information simply and concisely told and supported by proof. Alabama's exhibit will marshal these industrial assets in a form to arrest attention, command interest and invite further inquiry. The story will be told through charts, maps and samples of chemicals, and mineral deposits.

Dominating the exhibit, and probably its most arresting feature, will be a large master map of Alabama, eight feet high by five feet wide, which will portray in graphic detail the location of all mineral deposits which have commercial possibilities, sites of all chemical industries, electric generating plants, power transmission lines, sub-stations, towns and cities served with hydro-electric power, transportation facilities, highways and other sign posts on the path of Alabama's rapid industrial advance. This master map presents a comprehensive summary of industrial Alabama, traces the factors which have entered into Alabama's industrial expansion and hints significantly at Alabama's industrial potentialities and future.

Industrial possibilities are elaborated in detail in a series of smaller charts and maps, each of which is devoted to an exposition of a single mineral or industry. These maps will show, for example, the location of graphite, kaolin, glass sands, limestone, dolomite, and mica; the extent of Alabama's coal and iron fields and the progress which the state has made in covering these and other raw materials into finished products of commercial value.

The Alabama Power Company's exhibit will be in charge of officials of the commercial department—T. D. Johnson, Dr. S. J. Lloyd and E. T. O'Connell—who have made industrial conditions in Alabama their life study and who are thorough-

ly conversant with the latent resources of the state and also the type of information which makes the most effective case in talking to the capitalist who may be seeking an opportunity of remunerative investment.

While the Exposition is in progress, opportunity will be taken to show in the private theater on the exposition floor, three motion pictures of the Alabama Power Company—"King Cotton," "Electricity at Work" and "Minerals and Metals."

Among Alabama products which will be exhibited, either by samples or illustrated through charts and descriptive literature prepared by Dr. S. J. Lloyd, of the University of Alabama department of chemistry, are: graphite, kaolin, glass sands, lime, limestone, dolomite, mica, calcium arsenate, rosin, turpentine as extracted from gum and distilled from stumps in cut over lands, marble, quartzite, asphalt (from vicinity of Russellville and Hartselle); red, brown and gray iron ore; coke and its by-products, including naphthalene, latest by-product industry to begin operation in North Alabama; cotton, cotton seed, cotton seed oils and many other products of the mill, mine and farm.

Descriptive literature, compiled with the same careful attention to accuracy and avoidance of overstatement and dealing with other more general points of interest to industry, will also be distributed. The whole exhibit will be housed in a space 22 feet wide by 14 feet deep.

As practically every chemical industry in America will be represented at the exposition which will draw thousands, it seems certain that the Alabama Power Company has selected a most effective medium by which to advertise Alabama to a clientele specifically interested in learning about those resources, and their present day commercial possibilities.

Plans 150,000 Horse Power Water Project on Great Pigeon River in North Carolina.

A water power project on the Great Pigeon River in North Carolina for an ultimate development of 150,000 horse power is planned by the Pigeon River Power Co., Waynesville, N. C., which has applied to the Federal Power Commission, Col. William Kelly, chief engineer, for authority to build a dam. With reference to the project, O. C. Merrill, executive secretary of the Federal Power Commission, wires the MANUFACTURERS RECORD:

"Pigeon River Power Co. proposes a dam 150 feet high in Pigeon River; tunnel, five miles to power house at Waterville on North Carolina-Tennessee line; total fall 650 feet; initial installation, 50,000 horse power; ultimate development, 150,000 horse power; sell to Asheville and Knoxville and bring industrial development for remainder; address F. R. Weller, Mills Building, Washington, D. C."

Mr. Weller is consulting engineer of the company.

It is stated that the Federal Government claims jurisdiction, because the Big Pigeon River is a tributary of the French Broad River in Sevier County, Tennessee, and the ultimate development of the project would affect navigation on the French Broad and the Tennessee rivers.

West Virginia to Build \$275,000 Hospital for Colored Insane.

Charleston, W. Va., September 10—[Special.]—West Virginia will erect a \$275,000 hospital for colored insane at Maggie, bids for which are to be opened by the State Board of Control, James S. Lakin, president, at its office in this city on November 1. The building will be 44 by 210 feet, three stories and basement, of reinforced concrete, stone and brick, with a slag roof, cement, tile and composition floors, steam heat and electric lighting.

Paul A. Davis, 3rd and Dunlap of Philadelphia are the architects.

France in the Ruhr Only to Secure Payment of Reparations.

By FRANK GOULD, Vice-President, MANUFACTURERS RECORD.

An Englishman whom I met on the train described the trip to the Ruhr as the "most terrible journey" he had ever undertaken. In his particular case, there was some reason for his opinion, but as a matter of fact it was made without special hardship of any kind. There were numerous delays due to the different Belgian and French army crews handling the train and the inspection of baggage, which at times were rather annoying, but there was nothing terrible about it.

The Englishman's distress came about from the fact that if a passenger is not in his compartment at the time of the customs examination of baggage, the officials have an abrupt way of chucking the baggage out of the window. On this particular train the vestibule platform of the "restaurant wagon," or dining car, had become damaged—and as a matter of fact there were several cars in that condition—so that passengers on the front end of the train were compelled to wait until it stopped and then run back to the dining car if they wanted anything to eat. It was then necessary to wait until the train stopped again before one could return to his compartment. In my own case, I was fortunate to get back in time to stop a Belgian customs officer, who was in the act of throwing my grips to the platform outside. My English acquaintance was not so fortunate and when he returned to his compartment he found his luggage, as he called it, had disappeared. He finally located it in the customs house where he had to stand in line and go through the experience of answering all sorts of questions and of having his baggage taken apart.

Great care is exercised in examining the credentials and goods of those in the various towns who are leaving to go elsewhere. Incidentally, my fellow traveler had the further misfortune to get to the diner after the meal was over and all he could persuade the man in charge to produce was a sandwich, which he said he "had to force out of him."

On my journey down I had as company two or three hundred Belgian soldiers in full equipment going to the front. They were a grim determined looking lot, short in stature, but of manly soldierly bearing. They were silent too, as if they appreciated the serious nature of their task.

We left Brussels in a pouring rain at midnight and the porter who had escorted me from the hotel reassured me by saying he thought it very unwise to go down by night when the Germans were in the mood to blow up trains containing troopers. They had done this a few weeks before and killed ten or fifteen people. Some folks have a habit of such diabolical suggestions when it is too late to change your plans. The train was late in arriving from Ostend and when I finally got on and was shown to my compartment I found my companion for the night was an English salesman going into the Ruhr in search of customers. He makes trips there every two or three months and we talked until two o'clock in the morning about Germany and the situation confronting Europe. He had a very high respect for the German people and declared that his experience with them had indicated that they did not want war any more than anybody else wanted it. He was anxious to have my views of the situation before I returned to Brussels so that I met him later on at Cologne and we were able to compare notes.

I was not able to feel the same about the Germans and their sincerity as he did. In the first place, there is too much evidence of prosperity following the war to convince me that German capital has been in any way seriously impaired. The traveler passes through town after town where huge new

factories have been erected and where public improvements of magnitude have been undertaken, and where dwellings and other buildings, parks, business blocks, in fact where everything indicates a degree of wealth not observable anywhere else in Europe. The wretched condition of German currency at the moment inflicts no doubt great hardships upon a certain class of Germans, particularly those who were formerly living on fixed incomes, but actual property, real property as we know it, has not been destroyed, nor even scratched. It has been improved and increased. The magnitude of the extension of old plants and the building of new ones must impress every thoughtful person that despite all alleged poverty, German industry has been spending many millions in getting ready for trade expansion.

If the question is asked of a German what has become of Germany's capital, where is the gold they formerly had, he will tell you they paid it to England and France, and some of the common people have been made to believe such a bare-faced lie.

The grotesque tumbling of the mark is, of course, a matter of concern. The German people themselves despise it and would rather have ten cents in American money than twice its value at the time in marks, because they tell you that "tomorrow the mark will be worth nothing." The shop keepers are at their wits' ends to know how often to change the cards in their show windows. It is difficult to see how they do business. Nevertheless, business goes on apace. One practical outcome of the situation is in the fact that a proportionate sense of values is destroyed. I was charged fifty cents (500,000 marks) for a good room, with bath at the Kron Prinz hotel at Cologne and I think they included my breakfast too, but I paid a dollar and a half (or 1,500,000 marks) for a taxicab ride and when I offered the waiter in the hotel a tip of 250,000 marks, which was fifty per cent of the bill he asked me if I did not have half the value, or ten cents, in American money as he would rather have it that way than in marks. So the confusion has brought about an upset in the sense of values which reacts upon business.

The common people in Germany, the working people on the trains, in the hotels and on the streets, profess to believe that they had nothing to do with making the war. Anyhow, they insist they did not want war and some of them go so far as to say they know the world suspects the Kaiser of it and if they were convinced that that was so they would be glad to have the chance of hanging him. They talk a lot about their own sufferings and the wounded and dead and the hopelessness at the moment, but never a word about the sufferings and losses many times as great of France and Belgium. So far as actual poverty is concerned I saw none of it in this occupied area and I am convinced that Germany's whole game from the time that these paper marks were decided on was first to sell them to credulous foreign investors, and it is reported that English people put \$2,500,000,000 into German marks and Americans about the same amount, thus enriching Germany and its big bankers and industrialists by that operation, and later as the number of marks increased and the value declined, to finally repudiate them and leave those who have been foolish enough to buy them without anything for their pains.

From all parts of Germany reports come that there is a wild orgy of spending and the conviction is that the only value the mark has is what it may buy at the moment.

The French in the Ruhr are very determined. My talks

with French officials at Dusseldorf convinced me that they are there to collect their money and are going to stay there until they either collect it or have good evidence that payments are going to be made. They express the attitude of their government as conveyed to them that they have no militaristic aims, nor any desire for more territory and I believe it. This was touched upon in my letter of some weeks ago from London. Their course of dealing with the German people is one of extreme moderation. It is true they place some hardships upon the movements of Ruhr inhabitants and on some kinds of freedom that might inure to the detriment of France, but on the whole they are conducting themselves in a way that to say the least would be far different if the German position were reversed.

There are fifty thousand troops in the Ruhr. I asked some of the officers what would happen if the German people rose up by millions to put them out and they admitted they had considered such a possibility and that they would "try to kill as few as possible." Later it is reported that Stinnes and some of the industrial leaders have gotten the government to consent to let passive resistance cease and the factories and mines resume normal operations, so that as the output is available the French may collect their part of it. If this is true it is the most encouraging news I have seen about the situation since June. Because I am convinced if payments begin in this way, or any other way, France will begin to evacuate. French officials are paying for what they need. At the hotel in Dusseldorf, which they had commandeered for their own purposes, they are paying for everything as they go along.

The Stahl Haus, at Dusseldorf, which was the building used by the steel manufacturers of Germany for their club house or conference building—and a very magnificent building it is, fitted with handsome furnishings and marble stairways—is now the army headquarters of the French. I noticed that the furniture has been covered and that runners were on the fine rugs and evidently great care was being taken to see that no harm was done to the building or to its contents. In fact, it appeared to me that extraordinary care was used to that end.

The railroads were in good condition, cars are painted, stock in good order and the trams, or trolleys, were all in excellent shape. The fares are ridiculously cheap. I paid 7500 marks, which was about three-quarters of a cent, for a ten mile ride from Benrath to Dusseldorf and it was as comfortable a ride as I have ever had. The trolley was operated almost noiselessly and very smoothly. The passengers were mostly business men with brief cases going to Dusseldorf.

The Ruhr is the center of enormous metallurgical interests. It is the very heart of Germany's coal and iron and steel industry. It is of immeasurable value to any country that controls it, and if it belonged to France that country would become the dominant economic power of Europe with an iron and steel output second only to that of the United States and yet I believe France has no intention to hold it any longer than necessary to secure the payment of reparations. If conditions were reversed Germany would never let go the Ruhr and would hold it just as she robbed France of Alsace and Lorraine after the Franco-Prussian war in order, to secure the great stores of iron ore in those provinces.

Plans for \$700,000 Hotel at Hagerstown.

Hagerstown, Md., September 10—[Special.]—Plans for the hotel to be erected here for the Hagerstown Hotel Co. at a cost of about \$700,000, are being prepared by Franklin P. Hammond of New York. The building will be 140 by 60 feet, 12 stories, of fireproof construction, with concrete and hardwood floors, metal doors, mail chutes, ventilators, rolling partitions, steel sash and trim and wire glass. Its erection will involve the use of hollow fireproof and interior tile and ornamental terra cotta.

West Virginia Non-Union Coal Miners Will Be Patriots in Helping to Save the Nation from Freezing.

Charleston, W. Va., September 3—[Special.]—In taking the necessary measures to insure an adequate coal supply for the nation, in so far as West Virginia mines are concerned, the directors of the West Virginia Coal Association on the eve of the anthracite strike laid stress on the fact that West Virginia mines would be able to exceed the monthly output of 8,000,000 tons a month reached at the height of the 1922 strike because a large part of the mines in two fields virtually closed down last year are now on a non-union basis and their tonnage will be an added guaranty that no part of the country need suffer because of the walkout in Pennsylvania. In other words the directors of the association were emphasizing the fact that the greater the number of non-union mines, the less danger there was or is of the country being deprived of a fuel supply at any time.

The association in a statement said:

"At a meeting of the board of directors of the West Virginia Coal Association called on receipt of the news that a strike in the anthracite coal fields of Pennsylvania appeared inevitable, it was pledged that inasmuch as West Virginia has the grade of coal best suited as a substitute for anthracite, that the association take every possible step in expediting the mining of coal in order to save the country from distress which otherwise might ensue.

"The directors are determined that as in 1922, during the last strike called by the United Mine Workers, that they will exert themselves to the utmost of their ability to prevent any discomfort among domestic coal consumers, or any interruption of the nation's business.

"The part that West Virginia played in the strike of 1922 was officially commended by President Harding who declared that the operators and miners in the non-union fields of this state had spared the country untold suffering. At the time of the last strike the West Virginia fields broke all production records and in June, 1922, at the height of the strike in the bituminous mines, were producing 8,000,000 tons of coal a month and could have produced much more had the car supply been better. This production was mined in spite of the fact that two of the state's largest fields were virtually closed down because most of the mines in those fields were operating under union contracts. A large part of these mines are now on the non-union basis and their tonnage will be an added guaranty that no part of the country need suffer because of the walkout in Pennsylvania.

"A part of the nation again is menaced with threats of curtailment of its fuel supply. West Virginia operators pledge themselves not only to provide an ample supply to all parts of the country but to maintain reasonable prices as they did in 1922 when the quotations on West Virginia coal were kept within, and in some cases below the fair price mark set by the government.

"We have the coal, we have the mines, we have the workers and we have the equipment to take care of almost any demand made upon us if only we are assured that sufficient railroad equipment will be provided to move the tonnage that we are able to produce."

Germany Has Large Grain Crops.

An increase of nearly 50 per cent in Germany's grain crops this year over 1922 is indicated in forecasts cabled to the Department of Agriculture. Prussia's wheat crop is forecast at 63,000,000 bushels as compared with 43,000,000 bushels last year; rye at 218,000,000 bushels as compared with 150,000,000 bushels.

According to these forecasts, Prussia and Bavaria together will produce 77,000,000 bushels of wheat this year as compared with 54,000,000 bushels in 1922; rye production is forecast at 240,000,000 bushels as compared with 170,000,000 bushels; barley at 83,000,000 bushels compared with 56,000,000 bushels; oats 331,000,000 bushels compared with 217,000,000 bushels; spelt 2,600,000 bushels compared with 1,900,000 bushels.

Prussia and Bavaria last year produced more than 75 per cent of the total German wheat crop of 71,900,000 bushels, and nearly 83 per cent of the total German rye crop of 206,049,199 bushels.

Our Inland Waterways and Their Unlimited Possibilities for Broad Industrial Development.

ADVANTAGES OF RIVER TRANSPORT SHOULD RECEIVE WIDE PUBLICITY—INDUSTRIAL AGENTS NEEDED TO STIMULATE RIVER TRAFFIC AS WELL AS RAILROAD TRAFFIC.

By HAROLD C. FISKE, Major, Corps of Engineers, U. S. A.

For some time I have watched with interest the articles and editorials which have appeared in the MANUFACTURERS RECORD dealing with the subject of river and harbor improvement. Needless to say I am keenly interested in the development of navigation, particularly on our rivers, and believe, as you seem to believe, that the next few decades will see an important and valuable growth along this line in our country.

For years the advocates of river development have dwelt on the importance of carrying approved projects through to early completion and on the imperative necessity of adequate river terminal facilities and of just agreements for the interchange of freight between rail and water routes. In spite of the improvements along these lines that are now being realized there remains much to be done and doubtless much more publicity will be needed to keep public interest in these matters alive until these conditions become wholly satisfactory.

So much being clearly understood, I should like to invite your attention to another phase of this subject which has so far received but scant attention. Consider together for a moment both the railroads and the canalized rivers East of the Mississippi. It is occasionally pointed out that the river runs where Nature put it, while the railroad runs from city to city where economic conditions show it to be most needed. Hence, it is argued by the opponents of river traffic that the railroad runs from somewhere to somewhere, while the river—as a traffic route—runs from nowhere to nowhere.

In this country the growth of railroads has been for the most part concurrent with or antecedent to the growth of centers of population, and it is true that cities and railroads hang together, so to speak, very consistently. In Europe, on the other hand, what are now large cities were very generally located on streams long before the days of railroads, because these streams were more or less navigable, and the subsequent growth in importance of railroads has not materially altered the situation. In other words, while it is true that in this country large cities are found strung along large railroads, there is no fundamental reason why they should not as well be strung along large rivers. For the last century our minds have been diverted from rivers to railroads as traffic routes—that is all.

The location of the river is fixed by Nature, that of the railroad by man—but once the railroad has been built and becomes an essential traffic route, its location is, for all practical purposes, as fixed as is that of the river. It is as impossible, economically, to shift the one as it is, physically, the other. And if you stop to think of it—this fact is recognized, consciously or unconsciously, by railroad operators. The road is built and traffic begins. The die has been cast and from then on the road succeeds or fails, its original location is justified or condemned by the dividends that flow from the traffic it carries. Here is the first principle of successful railroad operation. Will extensions or improvements increase dividends? A project is prepared and once approved is, in general, pushed rapidly to completion, that dividends from the additional expenditure may begin to flow into the treasury as soon as possible. Are terminals inadequate or through rate conditions a hindrance? Improvements are effected and where losses are avoided they are effected

promptly. The railroad operators and the public may suffer mortal agonies in the process, but the deed is done.

At this point the river traffic man, as a rule, stops, but his railroad brother does not. He goes on and in his organizations are found passenger and freight agents and particularly industrial agents. The passenger and freight agents seek out and bring to their railroad all the existing traffic that can with any reasonable show of logic be routed that way. River navigation companies may have had similar agents from time to time, but seldom, if ever, have they been sufficiently active and aggressive to make any deep impression on the mind of the shipping public.

Lastly, but ranking high in importance, comes the industrial agent of the railroad. He, with his assistants, makes it a point to have at his fingers' ends a knowledge of the industrial resources of the regions which his road traverses, and of the location and relative merits of every potential factory or warehouse site along the line, he keeps closely in touch with the industries which are looking for new locations and these he seeks to locate along his railroad—all that traffic may grow and dividends may be uninterrupted. The passenger-freight agent for the river is all but non-existent, while an industrial agent for any river has never, so far as I know, been seriously thought of.

Let us consider the Cumberland and Tennessee Rivers, simply because they happen to be under my charge and I am most familiar with conditions there. On December 31, 1923, the Cumberland River will be completely canalized for six foot navigation from the Ohio River upstream for about three hundred miles—one hundred and twenty miles above Nashville. Some time after the Wilson Dam is completed, equivalent navigation on the Tennessee will be possible. On or near these streams are found coal, iron ore, zinc ore and other minerals, and hydro-electric energy is readily obtainable, the climate is healthy, land is inexpensive, and numerous important industrial centers can be reached by water via the Ohio and Mississippi Rivers. Each pool is fifteen miles or more in length and within the limits of that pool there is practically no limit to the volume of freight that may be moved by water. That is, each pool is a switching yard with a capacity equal to that of any railroad yard in the world. Between pools the volume of traffic is limited by the size of the locks to perhaps fifteen million tons a year, but this could be doubled and perhaps tripled when necessary to meet the needs of heavier traffic.

Here are regions possessing all the fundamental requirements essential to unlimited industrial growth. The industrial agents of the railroads in these sections recognize this fact, and no small part of the gratifying progress of this region is due to their efforts, both along and in co-operation with Chambers of Commerce, and the like, to locate industrial points along the railroads serving this section of the country. Only commendation can be given the railroads for their energy and resourcefulness along these lines. But if the large, successful railroads of this section find such a line of activity both profitable and necessary, how can the river, just struggling toward even the recognition of its existence as a traffic route, hope for an appreciable opportunity to render service unless the same or a better line of advertising is followed?

It all comes down to a case of advertising. No business

is really successful unless it advertises. Our improved rivers so far have given the greatest publicity to their future needs. This kind of advertisement should not be stopped or diminished, but to this must be added the advertisement of their present latent possibilities. True, such possibilities are often referred to in most of the publications dealing with the future of the waterways. But these general references have none of the force of the direct appeal that would be made by the well informed agent dealing with the individual prospect that he knows should locate on his river to the marked advantage of that prospect in particular and of the public in general.

All phases of railroad management are carried on under one executive head; construction, maintenance, operation, rates, terminals, expansions of business, etc., all report up to one man, the president. On the river, construction and maintenance are under an agency of the Government—the War Department. Operation is carried on by as many independent agencies as may see fit to go into the business; terminals are provided by the boat operators, the Government, municipalities, or private land owners, as the spirit happens to move them. Some boat lines may have a freight agent, but in this complex division of responsibility no one has provided an industrial agent, and I venture to say that on the rivers mentioned there is no agency ready or willing to undertake the expense or responsibility of securing such a man and of giving him ample facilities to do his much needed work. It is everybody's business, and hence, nobody's business. It is probably much easier to point out this need of an industrial agent than it is to find a satisfactory solution of the problem for these rivers, yet even if it serves no other purpose than to further study the matter, a suggestion is justified.

Consider the case of the Cumberland River simply as a typical example. Here the city of Nashville, located about in the middle of the improved stretch of river, far overshadows all other cities on that river in size, wealth and commercial importance. It is then suggested that the Nashville Chamber of Commerce assume undivided responsibility for securing and continuing on the job an industrial agent whose territory will include the entire navigable Cumberland River from Burnside to the Ohio River. Let this Chamber of Commerce secure all the financial aid and moral support possible from towns, cities, manufacturers and boat operators up and down the river who should be benefitted by his activities. But above all, let this one organization alone be responsible that a competent man is secured and is given ample opportunity, time and money to study his problem, build up a working organization and to give it a thorough test.

The inland waterways of our country offer almost undreamed of possibilities as traffic routes when the improvements necessary to meet modern transportation conditions have been made. A great deal has yet to be done before these improvements are completed. In the meantime, much has been accomplished and the best interests of the public and the good repute of these improvements will suffer unless the existing possibilities of available water routes are properly advertised and developed.

Will Build Furniture Factory.

Graham, Va., September 8.—[Special.]—The Bluestone Furniture Manufacturing Co., capitalized at \$200,000, has organized here with S. N. Hufford as president. Other officers are R. E. Baldwin, vice-president; R. K. Haskew, general manager, and R. Y. Barkley, secretary and treasurer. The company has purchased a 20-acre site and will build a two-story factory, 70x70 feet, for the manufacture of 250 bedroom and 250 dining room suites of furniture per month. Approximately 150 men will be employed.

\$500,000 Company to Develop Hydro-Electric Power and Build Cotton Mill, Etc.

Tallapoosa, Ga., September 8.—[Special.]—A charter has been granted to W. W. Summerlin and his associates, for a corporation with a capital stock of \$500,000 to be known as the Tallapoosa River Power & Textile Corporation, with headquarters here. Its object is the development of hydro-electric power, textile mills, and the development of a resort known as Camp, Ala.

Camp is in a big horse-shoe bend of the Tallapoosa river. In the bend is a hill overlooking the river, which runs around it. It is proposed to cut a tunnel through this hill—a distance of about 140 feet and dam the river at the bend, flooding something like 300 acres of land. This will create a lake holding an ample reserve of water, and at the same time will serve to develop 1000 primary and 1000 secondary horsepower, which may be obtained at an estimated cost of \$50 per primary horsepower.

This property is situated close to the Southern railway, and is conveniently located to furnish power for a textile mill of 20,000 spindles, which the new company plans to build either at Muscadine or Tallapoosa.

In addition to developing waterpower for the textile plant, the lake so created will add to the attractiveness of the resort and provide fishing, boating and bathing.

The corporation owns over 1000 acres of land in the vicinity which it plans ultimately to develop.

Correction in Report of Improvements to Hurt Building, Atlanta.

In the MANUFACTURERS RECORD of August 30 reference was made to the large addition which the Atlanta Realty Corporation will make to the Hurt Building at Atlanta and through an unfortunate printer's error in transposing a paragraph and adding unauthorized quotation marks, the George F. Hurt Engineering Corporation of New York was credited with a statement which they did not make. Their wire was as follows:

"Hurt building extension is merely completion of structure originally projected. Construction now will cost over \$1,000,000 and will be of same character as present building and will cover 20,000 square foot lot, 17 stories and basement and above lower stories will consist of two important wings along Edgewood avenue and Exchange place, respectively, with large V-shaped court between. Completed building will be one composite structure served by thirteen elevators and all facilities unified. We, with Hugh Tallant, of New York, will handle architectural work and the Realty Construction Co., of this address, will be the contractors."

Relative to the additional paragraph which the MANUFACTURERS RECORD regrets was erroneously credited, Mr. Geo. F. Hurt, President, of the Geo. F. Hurt Engineering Corporation, writes:

"It would have been an impropriety for us to have presumed to make a statement as to the affairs and policies of the Southern Bell Telephone & Telegraph Company. Furthermore, the statement that the L. W. Rogers Realty & Trust Company handled the transaction did not originate with us and so far as I am informed, is entirely incorrect."

New \$1,000,000 10-Story Hotel for Houston.

Contract has been awarded to Don Hall of Houston, Tex., to erect a \$1,000,000 hotel in that city for the Sam Houston Hotel Co., the building to be located at Prairie and San Jacinto streets. Mr. Hall wires the MANUFACTURERS RECORD:

"Ten-story hotel, L shaped building 100 feet each two streets; wings 36 feet wide; 205 rooms, bath each room; reinforced concrete frame, face brick and stone exterior; cost \$1,000,000; owners Sam Houston Hotel Co., Carter Building, Houston; architects, Sanguist, Staats, Hedrick & Gottlieb."

Offices of the architects are located in the First National Bank Building at Houston.

Kaolin Mining in Clay County, North Carolina.

EXTENSIVE DEPOSITS NOW UNDER DEVELOPMENT BY COMPANY CAPITALIZED AT \$250,000—MODERN METHODS AND UP TO DATE EQUIPMENT.

By B. W. SIPE, Editor Cherokee Scout, Murphy, N. C.

The North Carolina Clay Company, Inc. is the new name of perhaps the largest clay mining company in North Carolina, which has recently changed its name from the Titanic Ore Company and increased its capitalization to a quarter of a million dollars. This Clay County concern is large in capitalization, large in its property holdings and the size of its clay deposits, and in the method and extent of its mechanical equipment to mine the kaolin found on its properties.

By test, the kaolin shows up to be among the best ever found in this country. Of unusual whiteness, high in plasticity, low in shrinkage and capable of standing a high degree of heat, the demand for kaolin from this deposit has increased to such an extent that the company has found it necessary to greatly enlarge its facilities and working force in order to begin to supply the demand. This explains the reason for

one opening has thus far been made. There is a tremendous tonnage here and it will take years to exhaust it. The deposits have been examined and estimated by clay experts from several different sections of the country and after making numerous drilling tests, they are of the opinion, that there are from eight to ten million tons in these two deposits, literally millions of dollars worth of clay. The company holds 180 acres of land and it is practically all underlaid with this kaolin. At many places the overburden is practically nothing and at no place is it heavy. There is such great demand for the clay that the company is planning to put on three shifts just as soon as men and quarters can be secured. "The company has orders booked three years ahead," said President Fisher recently "and any one of three or four companies would sign contracts for the entire output." From forty to sixty men are now employed on a single ten-hour shift, but when the new system is put into effect, about 125 men will be employed on three shifts of forty or fifty men each. This will give twenty-four hour operation.

Most of the kaolin is going to Ohio and New Jersey, according to the manager, where it is used in making the highest grade china and table ware, tiling, enamels, etc. Prod-



VIEW OF PLANT OF THE NORTH CAROLINA CLAY COMPANY.

advancing the capitalization from \$75,000 to \$250,000. The operations now cover approximately four acres and the commissary and tenements, which have been erected for the workers, cover another three acres.

The company's method of operation differs from most other clay mines in this state in that machinery is used throughout the process, with just as little man power as possible. The clay is taken from the mine hole and carried by conveyor through the washers, two sets of bins, through the compressors, placed in the dryers by hand and then loaded on the cars for shipment. The process is practically all performed by a hydraulic and conveyor belt system, it is completely integrated and arranged in proper sequence.

The kaolin is carried from the mine hole into a sluicing box by conveyor belt, then is pumped into large bins where, by special process closely guarded by the company, the coarser particles of sand, mica and other foreign substances are removed. Then the clay goes into a second set of bins where the finer particles of any foreign substances are removed. From here it is carried into the filter presses where it is subjected to a pressure of more than 150 pounds, the water pressed out, and moulded into oval discs about two feet in diameter and about two inches thick. These discs are then placed in steam dryers for twenty-four hours, after which the clay is ready for shipment. At present the finished product is being carried two miles to the railroad by a fleet of caterpillar tractors and trailers, and Ford trucks.

The company owns two bodies of clay in fee simple. The first deposit is about a quarter of a mile in length, 140 feet wide and 150 feet deep. The second deposit is half a mile long, 250 feet wide and approximately 150 feet deep. Only



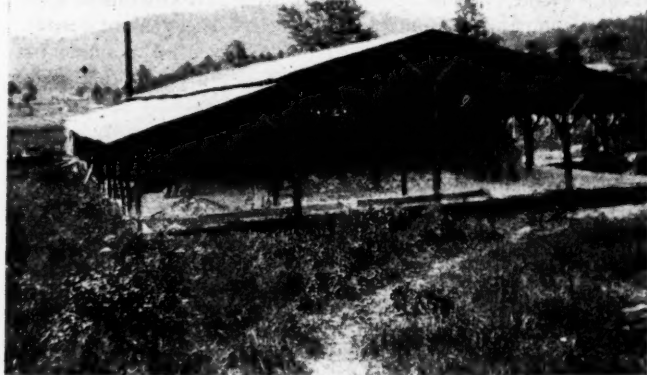
INTERIOR VIEW OF MINE HOLE.

ucts made from this kaolin are said to equal those made from the much talked of foreign clays. This clay requires the addition of a very small portion of other clays to be thoroughly workable.

The clay is remarkably free from foreign substances, and

by a special process worked out by the company officials, these small portions are entirely removed. The refuse, consisting largely of pure silica sand has been tested for road purposes and found to be excellent for that purpose. It is being used locally.

Tenement houses have been constructed for much of the help. Although most of the labor is drawn from the immediate section, officials considered it more desirable to have its labor supply on the ground, and this led to the construction of quarters both for white and colored laborers. They bunk and do their cooking in these quarters. As soon as possible, more quarters will be constructed and a sort of hotel for the workers opened up. Lumber is being placed on the ground now for this latter purpose. A company commissary is operated on the grounds for the convenience of the help. The officials have built houses on the grounds and make their homes there. The property is located on the Hayesville-



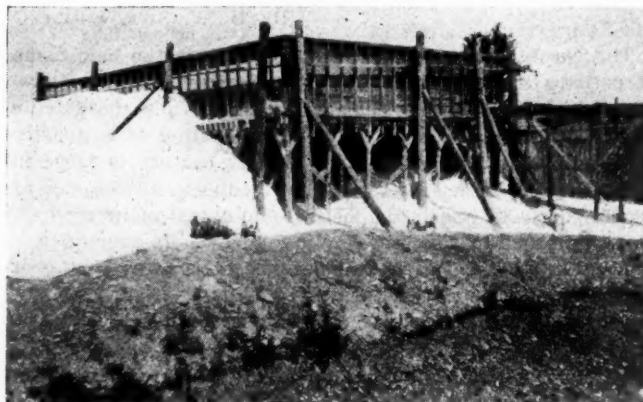
DRYER AND SHIPPING SHED.

Murphy road, about two miles out of Hayesville, which is the postoffice. However, this new development is taking on the appearance of a small town and no doubt before long a new postoffice will be established.

This huge development is being undertaken by northern capital. President E. E. Fisher of the company is a native of New England, although he came south from Toledo, Ohio. His son Arthur is associated with his father in the management of the business and a few intimate friends make up the company, which is a closed corporation. Mr. Fisher came here about two years ago and investigated the property and then organized the Titanic Ore Co., The original plan was to mine titanium and other ores along with the kaolin. But the kaolin has proven such a tremendous deposit and the demand has increased so rapidly, that the mining of anything but kaolin for the present, at least, has been given up. For a year and a half tests and experiments were made with the clay and about six months ago the company got such favorable reports from potteries and ceramic engineers over the country that it began to install machinery. Boilers of 160 horsepower now drive the finishing machinery engine of 75 horsepower capacity. Smaller engines are used for driving the pumps and conveyor system. A steam crane is being placed in the mine to pick up the clay and place it on the conveyors. Additional filter presses are being added, also drying machinery, which will necessitate the building of more sheds and more washing vats, and greatly increase the output. It is expected that the tonnage can be increased to several cars a day when the new equipment is in place.

This development in southwestern North Carolina is only one of a great many possibilities in this section. The water-powers on the rivers in this extreme corner of the state are sufficient to generate electrical energy to turn the wheels of factories and plants to fill the various beautiful valleys

stretching along the streams. The undeveloped mineral resources, such as marble, talc, kaolin, copper, iron and other ores, as well as the forests of virgin hardwood timber offer unlimited opportunities. Mr. Fisher is demonstrating what can be done here and it is believed that his achievements



ONE OF THE BINS USED IN FIRST PART OF WASHING AND CLEANING PROCESS.

will bring others into this field for development. Mining and smelting propositions, wood-working plants and many others would find this an excellent location on account of the combination of natural resources together with the unlimited labor supply and the competitive freight rates from this point.

Residences and Small Structures Feature August Building Activity in the South.

Atlanta, Ga., September 9—[Special]—Building in the leading cities of the sixteen Southern states suffered a slight loss in August, over August, 1922, according to figures compiled by the building survey department of G. L. Miller and Company, real estate bond house of this city. Those cities where comparative figures are available show a decrease of slightly less than five per cent.

Those who are in close touch with construction records declare that the temporary set-back suffered in August, which is the first month of the present year to fall below 1922 figures, does not indicate a slackening of the present building boom in the South. It is pointed out that this boom began in the middle of last year and was reaching previously unheard-of figures in August, 1922; so that it is considered a sign of a highly healthy condition that the past month should have so nearly equalled last year's figures.

Figures showing the official building permits of a hundred cities indicate that Louisiana, Arkansas and Tennessee are building well above their 1922 program. Washington and Baltimore are also in excess of their previous marks. The Southeast, however, where many large single structures swelled the totals of a year ago, has failed to meet these figures during the past month.

Memphis is well in the lead of cities of the farther South, with a total of \$2,138,890. Dallas takes second rank with \$1,810,082. New Orleans, with an unusual spurt, has taken third place with \$1,649,025, closely followed by Shreveport, La., which shows an excellent total of \$1,574,677. Nashville more than doubled its 1922 permits, taking fifth place with \$1,417,794. Atlanta, for the first time in many months, has fallen below a million and a half, and takes sixth position with \$1,361,460.

Few very large structures were noted during the month. The greater part of the permits were for residences and small commercial structures. School and college buildings make up a considerable total in the Carolinas; while large hospital units were begun in New Orleans and Little Rock.

Louisiana Completing and Placing in Use 910 Miles of Highways in Two Years.

DURING 1922, 350 MILES WERE COMPLETED—240 MILES ADDITIONAL PLACED IN COMMISSION TO AUGUST 1 THIS YEAR—PLAN TO FINISH 320 MILES MORE BY END OF 1923.

By J. E. CLAYTON, Oakdale, La.

The Louisiana Highway Commission has issued a statement, regarding the highway system in this state and giving a resume of the work completed and contemplated on the main state highway. The report shows that, during the year 1922, there were 350 miles of highway completed and that, from January 1, 1923, to August 1, 1923, there have been a total of 240 miles additional completed. There are as present 640 miles of highway under construction and the commission hopes to complete 320 miles of that work by January 1, 1924. This will give a total of 910 miles of highway completed and placed in commission during 1922 and 1923.

One of the first cross-state highways to be completed is the Jefferson Highway, from Shreveport to New Orleans about 415 miles in length, nearly 400 miles of which is completed at the present time, and less than 20 miles of which remains to be constructed. The last length of this highway, about 19 miles, has been placed under construction and should be completed within the next six months.

The next highway to be completed, and it is possible that it will be completed as soon as the Jefferson Highway, is the Southern National Highway, generally known as the Old Spanish Trail. This highway traverses the southern part of the state entering from Mississippi just north of Slidell and going into Texas at Orange, Texas. Of its length of 357 miles in Louisiana all is completed or under construction except about six miles in the Sabine River swamp, adjoining the state of Texas, where an experimental road one mile in length is being built to ascertain the feasibility of attempting to cross this swamp with the highway. At present a ferry is being maintained between the Louisiana end of the highway and the Texas line across the Sabine River. This highway crosses thirteen parishes between New Orleans and the Texas line at Orange. The construction of a bridge across Mermentau River will be begun in the near future and should be completed within the next twelve months. In the meantime a ferry is taking care of traffic across the river.

The Dixie-Overland highway which crosses the State from east to west passes through Shreveport, Ruston, Monroe, and entering Mississippi at Vicksburg, is either completed or under construction throughout its entire length, except for a distance of seven and one-half miles which it is expected will be placed under construction in the near future. Of this seven and one-half miles, six and three-tenths are in Bossier parish and one and two-tenths are in Richland parish. Like the Old Spanish Trail this highway connects the states of Texas and Mississippi. Its length is 199 miles.

The Pelican highway enters the State from Arkansas north-east of Bastrop in Morehouse Parish and ends at Lake Charles, crossing nine parishes. It has a length of about 230 miles of which 155 miles are complete, forty-one under construction and thirty-four yet to be constructed, all in Morehouse Parish. It is expected that this highway will be completed during 1924.

The Pershing highway enters Louisiana from Arkansas just north of Ruston and thence follows a southerly course passing through Ruston and Alexandria and connecting with the Old Spanish Trail at Lafayette. It has a length of 230 miles, 143 of which have been completed, fifteen of which are under construction, and seventy-two of which are yet to be constructed. The seventy-two miles yet to be constructed are in the following parishes: thirty miles in Winn Parish, twenty

miles in Union parish, eight miles in Grant parish, seven miles in Lafayette parish and seven miles in St. Landry parish. It is expected that this highway will be completed sometime during 1924.

The Ozark highway also enters the State from Arkansas and also follows a southerly course in Louisiana. It enters the state just north of Lake Providence and passes through that town Tallulah, St. Joseph, Vidalia, and thence enters Mississippi at Natchez. It again enters Louisiana north of St. Francisville and passes through that town, connecting with the Jefferson highway at Baton Rouge. Its total length is 180 miles, 115 of which are completed, thirty-three miles of which are under construction, and about thirty-two miles of which (in East and West Feliciana and East Baton Rouge parishes) are yet to be constructed. For the entire stretch of thirty-two miles surveys have been completed and plans are in course of preparation.

The Beauregard highway which is 130 miles in length, extends from Shreveport to Lake Charles. It follows the Jefferson highway from Shreveport to a point in Sabine parish, and then passes through Leesville, and DeRidder. At Shreveport this highway connects with the Shreveport-Arkansas highway and with the Jefferson highway for the north and with the Dixie-Overland highway for the east and west. Of the total length 60 miles are completed and 70 miles in Sabine and Vernon parishes yet remain to be constructed. While no work is under way on the highway at present it is expected that a good portion of the mileage remaining to be completed can be placed under construction by or early in 1924.

The Hammond-New Orleans highway enters the State from Mississippi just north of Kentwood, passes through the towns of Amite, Hammond, Ponchatoula, Manchac, Frenier and ends at New Orleans. It has a total length of about 95 miles of which about 45 miles are completed, 23 miles are under construction and 27 miles remain to be built, in St. John, St. Charles, Jefferson and Orleans Parishes. The 23 miles now under construction between Ponchatoula and Frenier probable constitute one of the largest highway projects in the entire South, as it is estimated that by the time it is completed it will have cost in excess of \$1,000,000.

The Baton Rouge-Hammond-Slidell Highway extends from Baton Rouge to Slidell, where it connects with the Old Spanish Trail leading to the east and leading to New Orleans on the south. This road has a length of about 100 miles, 62 miles of which has been completed and the remaining 38 miles of which are under construction.

Contract Awarded for \$250,000 Baking Plant.

Charlotte, N. C.—Contract has been awarded to the Jones Construction Co. of this city for building the bakery to be erected here by the Carolina Baking Co., H. O. Miller, president, at a cost of \$250,000, and work will begin at once. The plant will be two stories and basement, on a site 100 by 128 feet, plans providing for a building of two departments—one for making bread and the other for cake. Offices of the company will be installed on the first floor.

The bread department will accommodate five ovens and the cake department two. A 20-ton ice compressor will be installed in the basement, which will also provide cold storage rooms for butter, eggs, etc. W. H. McCormick & Co. of New York are the architects.

HANDLING COAL BY SILO.

New Plant Placed in Operation—First of Its Kind in Louisville.

Louisville, Ky., Sept. 8—[Special]—The Charles Buddeke Coal Co., Louisville, established in 1902, and operating a retail yard, has recently placed in operation the first silo type of coal-handling plant in Louisville, and one of the few such plants in the state or South. While such plants are frequently seen in the North, especially in Ohio, Indiana, Michigan and Illinois, the Louisville coal men have depended largely on frame elevators, and coal-dumping trestles.

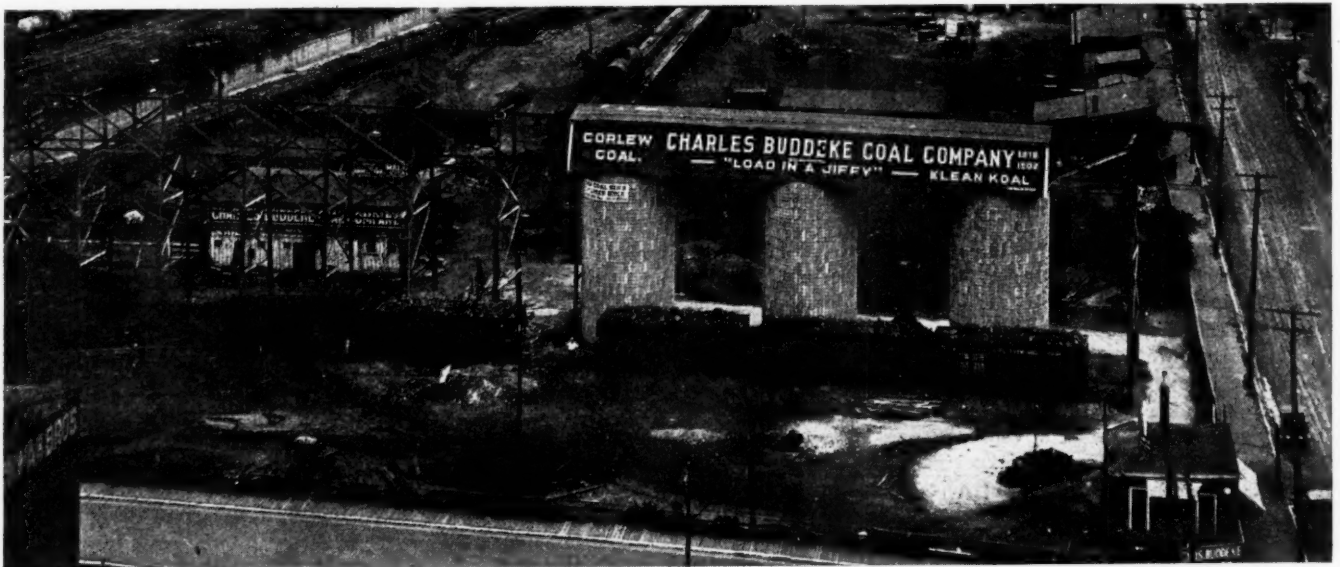
Neff & Frye, of Camden, O., erected the concrete silo pockets, while the Godfrey Conveyor Co., of Elkhart, Ind., installed the conveyor equipment.

The pockets are built of cement blocks, 2 1-2 inches thick, and are reinforced with exterior steel rods, or hoops, placed

The bottom opens, and the coal rolls out, resulting in comparatively small breakage in handling. Each silo has a chute at the bottom, which allows of loading trucks or wagons from this chute or spout, by gravity. There is a switch on the north side of the silos, and on the south side is the wagon drive for loading trucks. The small switch on the south side of the yard is used for hand unloading of yard stocks only.

Spaces left between the three silos now in use are large enough to permit erection of two additional silos. There is also additional space at each end. Charles Buddeke plans eventually to have seven silos in operation.

Louisville coal men have watched development and operation of this plant with interest, as it is an entirely new idea here in coal handling. There are several local plants using the Godfrey conveyor system, but no others use the silo idea. Some coal men are not convinced that the concrete type of construction will stand wear. However, all



VIEW OF SILO COAL HANDLING PLANT AT LOUISVILLE.

at intervals of nine inches. The pockets are 20 feet in diameter, forty feet high, resting on a concrete base, six feet above the ground level. Capacity of the pockets is around 250 tons each, the three silos holding 800 tons.

Two carloads of Michigan cedar telephone poles were used in construction of the conveyor supports, other than the sections resting on top of the silos. A steel "I" beam extends the length of the silos, and back over the yard for unloading coal to the yard when hoppers are full.

Coal entering the yard on the north side switch is dumped to a concrete pit, from hopper bottom cars. It slides by gravity to a boot, equipped with a gate. This gate is raised enough to permit coal to roll into a 2600 pound capacity steel bucket, operating on cables, which is lifted by the Godfrey hoisting machinery and carried to the "I" beam rail, thence to pockets, or yard storage. The mechanical equipment is all operated by a 15 h. p. motor, housed in a small building alongside the dumping pit.

Figuring cars of 50 tons capacity the plant has a capacity of 16 cars. The north switch has a standing capacity of ten loaded cars, while a short switch on the south side has a capacity of five cars, making a hopper and car capacity of 31 cars. The yard is 300x340 feet, while the entire conveyor is but 280 feet long, and twenty feet wide, which leaves a large yard space for piling surplus yard stocks.

Unloading the bucket is performed by means of a trigger on the bottom of the bucket, which releases when it is dropped to the ground or to coal already in the hoppers.

pressure is from within, and is well taken care of by the close hooping or rodding of the pockets, with adjustable steel rods which can be taken up as they stretch, by means of turnbuckles.

The tops of the silos, that is the edges, are protected from being bumped by the coal bucket, through bolting in heavy pine timbers. Prior to the placing of these timbers a green engineer bumped a bucket against the edge of the near silo, knocking off a couple of layers of tile, which have since been replaced.

\$1,000,000 Improvements and Extensions to Power Plant—Increase Capacity 50 Per Cent.

Huntington, W. Va., September 8—[Special.]—Improvements and extensions under way at the plant of the Consolidated Power & Light Company at Kenova near this city, will enable the company to increase its capacity at least 50 per cent and will make it one of the largest enterprises in the tri-state region.

There are now being installed five new Babcock & Wilcox boilers of 1000 horse power each, with combined steam pressure of 1250 pounds. Apparatus for the handling of coal and ashes is being installed at a cost of \$85,000. The company is also installing a 20,000 horse-power turbine and generator made by the General Electric Co. of Schenectady, N. Y. There is also being built a pipe line from the pumping station on the Big Sandy River to the power house. The improvement and installation work in the power house alone will cost more than \$1,000,000.

Ships First Carload of Radiators from New Plant.

The Republic Boiler and Radiator Company, Baltimore, Md., reports the shipment of its first car of radiators. This is a new manufacturing enterprise recently established in the Woodberry section of the city and operating under especially designed machinery and equipment for the "continuous principle" production of radiators of one, two, three and four-column design. Though this concern has only begun to operate on a commercial scale, an official of the company reports orders ahead amounting to from \$400,000 to \$500,000, and that it is now figuring on a contract to supply 1,000,000 feet of radiation in 1924 to a large boiler manufacturer of the East.

The capacity of the plant will be about 50 tons or 10,000 feet of radiation a day, and in addition ultimately a capacity of about 20 tons a day of boilers, though at present the company will confine itself to the manufacture of radiators.

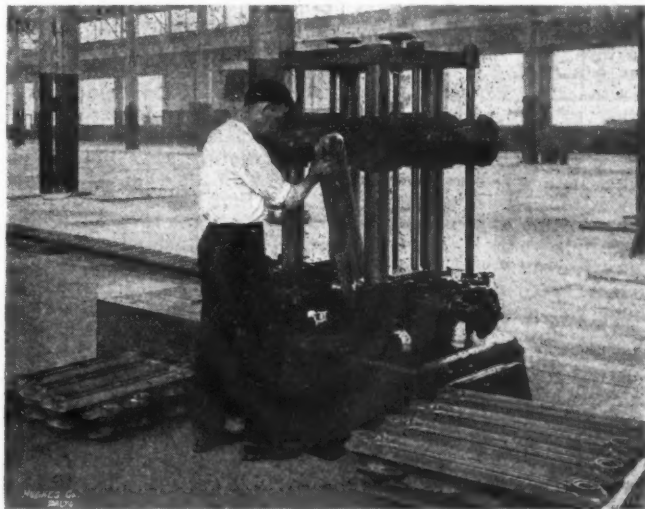
The Republic Boiler and Radiator Company is capitalized at \$1,000,000. Its new plant covering 100,000 square feet of floor space is modern in every particular. Latest ventilating, sanitary and efficiency devices are installed; overhead tracks for all sizes of electrically controlled traveling cranes; raw materials enter the plant from the Company's railroad siding by gravity, and finished materials move in a straight line to the outgoing railroad cars, giving advantages in time saving, labor saving, and reduction of cost of production. The whole plan of the organization and operation of the plant has been with the idea of perfecting and simplifying, and at the same time lowering the cost of manufacturing methods by the adoption of special time and labor saving equipment which can be operated by practically inexperienced labor, and modern manufacturing methods for the elimination of unnecessary motion in the handling of raw materials and the finished product.

The special machinery designed and built by the company follows the efficient methods of handling raw materials in the general plan of economic production.

A special boring and facing machine, built by the Poole Engineering and Machine Co., was designed to receive castings in a vertical position. The eight tools used for the operation may be separately or simultaneously adjusted,

saving the possible loss in castings caused by lack of proper adjustment between facing and reaming tools. The process of cutting sand by hand has been eliminated by a sand-cutting molding table which was perfected by the company. In fact, the molding table, testing machine, boring and facing machine and assembling machine were from original designs and built for the Republic Boiler and Radiator Company. The methods of manufacture and all equipment were designed by General Superintendent Wm. C. McKeown, who has for many years been identified with the manufacture of heating equipment.

Officials of the Republic Boiler and Radiator Company are: Edward L. Stock, president; Wm. W. Towson, vice-presi-



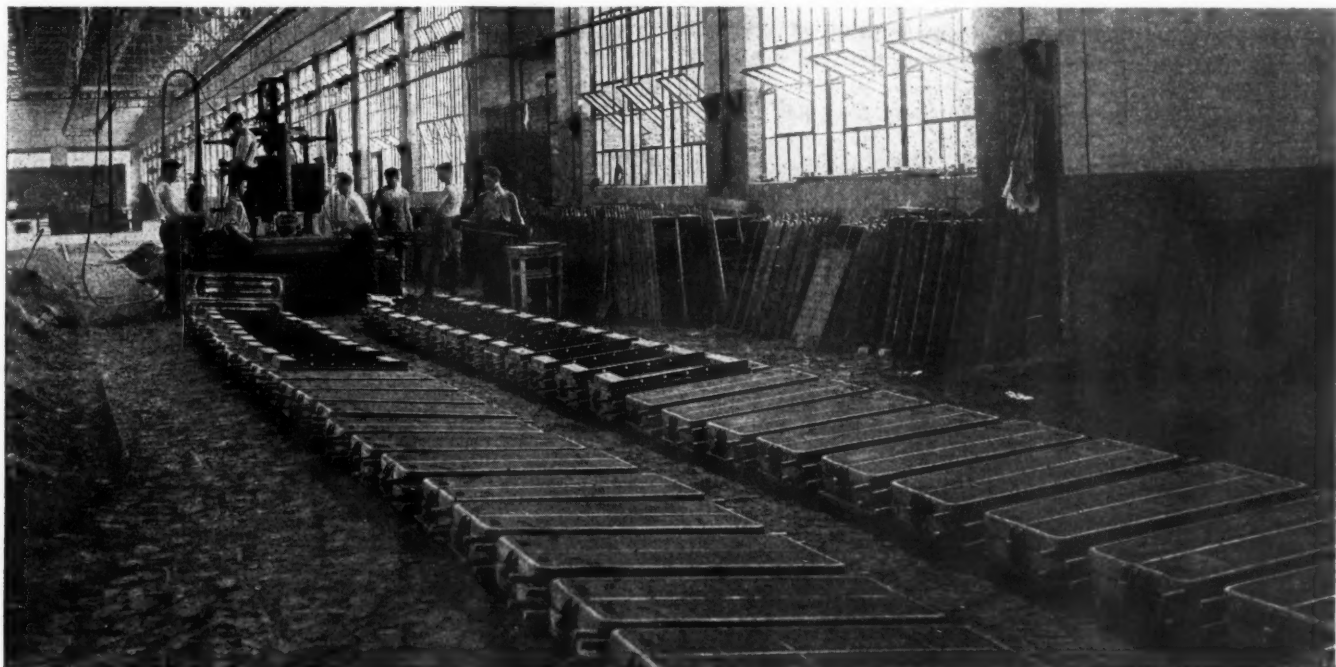
BORING AND FACING MACHINE.

dent; Wm. C. Garrison, treasurer, and Walter W. Talcott, secretary.

President Stock, Vice-President Towson and Secretary Talcott have long been prominent in the manufacture and marketing of heating equipment.

Mr. Garrison, the company's treasurer, in outlining the plans of the company, said:

"In selecting our site in Baltimore as a place for manufacturing our commodity, we considered it as the best lo-



RADIATOR MOLDING MACHINE AT PLANT OF REPUBLIC BOILER AND RADIATOR CO.

cation on account of freight differentials, shipping facilities, labor conditions, taxes, and distribution of raw material. There is but one other plant on the Atlantic Seaboard manufacturing boilers and radiators, and this market is tremendous, including more than a third of the population of the United States. Our market is right at home so to speak.

"The cities of Baltimore and Washington alone absorb between 1,500,000 and 2,000,000 feet of radiation every normal year, and more when building activities are abnormal, which condition exists today. This would amount to between 5000 to 6000 tons per year and this quantity of radiation would call for from 3000 to 4500 tons of boilers or a total of 8000 to 11,000 of radiators and boilers for these two cities alone. Reduced to days this would mean from 28 to 40 tons per day.

"The consumption of radiation and boilers in Washington represents less than one-tenth of the volume that the Republic plant would have available in its natural market out of which to find a place for its product. It is fairly estimated that between 5000 to 6000 tons of this material is absorbed normally each day in the territory where we will find no unusual competition; that is where we can compete with the prices of other manufacturers, assuming that our costs will be no lower.

"Attention is called to the fact that there has been no appreciable expansion of our line of manufacturing for more than six years despite the increase and demand so that today the producing facilities are far below normal requirements. No doubt the War is to blame for this situation, and yet practically every other line of manufacturing in this country has undergone a period of expansion.

"The progressive type of manufacturing used in the plant of the Republic Boiler & Radiator Company together with the improved methods of manufacturing will obliterate the necessity for skilled labor and the cost of production will likewise be reduced."

Terrell County, Georgia, to Have Community Hatchery of 10,000 Eggs Capacity.

Dawson, Ga., September 8—[Special.]—Something new in poultry husbandry has just been started by Terrell County, Ga., poultry enthusiasts. It is a community poultry hatchery with a 10,000 egg capacity.

After a careful survey of the county, which showed that enough standard-bred stock was being raised to operate a good-sized hatchery, poultrymen of the section, led by Dr. L. Lamar, of Dawson, decided to install a community hatchery—the first of its kind in Georgia, and one of the first of its kind in the South.

Accordingly they got busy, sold the necessary stock in the hatchery organization, and have sent for a 10,000 egg incubator, which will be installed in suitable quarters at Dawson as soon as it arrives.

While complete details of the hatchery have not yet been

worked out, it is expected that the organization will secure a suitable building and yards in which to install the incubator and take care of the young chicks, and pay an experienced operator to care for the plant.

Poultrymen will receive their chicks back after the eggs are hatched, if they wish to do business that way, after paying their pro rata share of the expenses, or they will receive their share of the profits made from the sale of chicks to other farmers in the community.

In either case, the new hatchery promises to be a very successful venture, relieving farmers of the necessity of operating their own incubators, and at the same time giving them an additional source of income.

Poultrymen all over the state are watching the new venture with interest, and if it comes up to their expectations, the community hatchery will soon become a regular thing in Georgia.

Plans \$2,000,000 Hospital in Kansas City.

Kansas City, Mo., September 10—[Special.]—Plans are being made for the erection of a \$2,000,000 hospital here by the Heart of America Hospital Association, Clarence G. Witt, president, with offices in the Massachusetts Building. The structure will be 12 stories, fireproof, of brick, stone and concrete construction. It will be built, owned and controlled by the masonic fraternity. James Oliver Hogg is the architect.

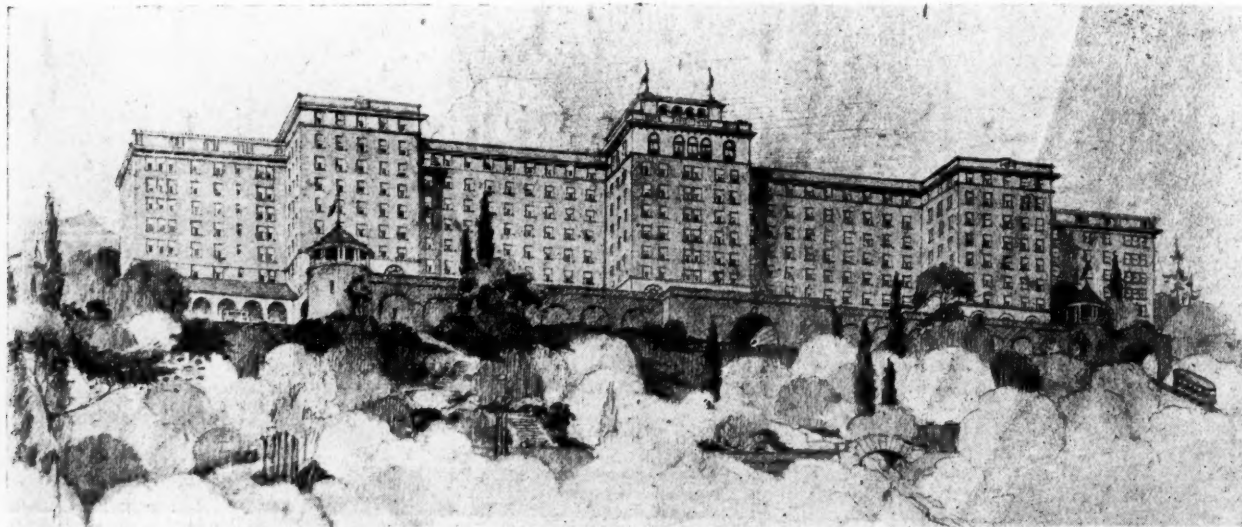
Limestone County, Tex., Lets Contract for \$300,000 Courthouse.

Contract has been awarded to the William M. Rice Construction Co. of Amarillo, Tex., for the erection of a \$300,000 courthouse at Groesbeck, Tex., for Limestone County. The contractors wire the MANUFACTURERS RECORD:

"Our contract Limestone County courthouse, \$300,000; building, 144 by 234 feet; four stories; building reinforced concrete faced with mingled shade brick and gray Bedford stone; Midwest Engineering Co., Amarillo, architect; work now starting."

Proposed \$2,000,000 Hospital for Hot Springs.

Plans are being developed by the Baptist National Hospital, Inc., of which Rev. Wm. Cooksey of Hot Springs, Ark., is vice president and general manager, to erect a \$2,000,000 hospital in that city. It is proposed to build a fireproof structure, of steel, concrete and pressed brick, with accommodations for 500 patients and designed to serve the needs of all classes. Plans and specifications for the building are being prepared by Hubert McGee, of Memphis, Tenn.



\$2,000,000 HOSPITAL PLANNED FOR HOT SPRINGS, ARK.

Labor Organizations Make Another Move Toward Banking the Savings of Their Members.

Washington, September 10—[Special]—Another step forward in the movement to have the large labor organizations bank the savings of the union members and guide their investments was taken by the International Brotherhood of Electrical Workers at its annual convention held at Montreal, Canada, August 20-25, inclusive.

From the national officers of the brotherhood who have just returned to the Washington headquarters it is learned that considerable time was given to discussing plans for the formation of a bank to be operated by the brotherhood to carry the savings accounts of the members and for the organization of an investment bureau to conduct an educational campaign among the electrical workers against investment in fly-by-night and blue sky investments.

At the conclusion of the discussion resolutions were adopted directing the national officers of the Brotherhood to make a thorough investigation of the advisability, feasibility, cost, etc., of forming a bank to hold the savings of the electrical workers and the organization of a bureau to advise the workers as to where to invest their savings and what investments to avoid. It was the sense of the convention that the national officers would take up this investigation at once and report from time to time to the National Council.

Charles Ford, national secretary of the International Brotherhood of Electrical Workers, stated today that the national officers of the electrical workers union will take up this investigation at once; but he could not predict when it will be possible to make a report. The investigation might require at least a year, he suggested.

Whether the Electrical Workers Bank will be located in Washington as is the Machinists Bank, the investigation will determine, it was said.

In taking this move the electrical workers are following directly in the footsteps of the Machinists Union which about two years ago built its own 8-story office building here and opened the Machinists Bank on the first floor to hold the savings of the machinists and members of numerous other labor unions.

The national officers of the brotherhood emphatically denied the report that the convention had discussed a plan of having the brotherhood organize a bank with a view to investing the accumulated deposits in electrical development and waterpower development projects with a view to placing a stipulation in the agreement that the plants should be operated on the "closed shop" plan. The discussion concerning the formation of the bank had not gone that far, Secretary Ford said; nor was it contemplated that such a step would be taken following the organization of the bank and the investment bureau.

The carrying out of such a purpose would be almost impossible, he suggested, even conceding that it was desirable.

SOUTH MAINTAINS ITS PACE IN NEW CONSTRUCTION.

Industrial and Building Items Published in Manufacturers Record This Year Break Seven Year Record.

Industrial, building and general development activities in the sixteen Southern States for the first eight months of this year have broken all records for any similar period as far back as 1916, with a total of 39,902 items published in the construction news department of the DAILY BULLETIN and in the MANUFACTURERS RECORD. During the corresponding period of 1916 the total was 41,156 items, while 39,597 items appeared for the same months of 1922.

During the five weeks of August 5311 items were published as compared with 4972 items for August of last year.

Construction of roads and streets is represented by 5619 notices for the eight months' period placing this class of work first in the long list. Items regarding bridge, culvert and viaduct construction, which are closely allied to road work, number 1841 for the period ending August 31, the total for last month alone being 209.

The development of miscellaneous enterprises is told in 3253 items appearing since January 1, placing this classification next only to good roads. Next in numerical importance come dwellings constructed represented by 2312 items. The number of dwelling notices that appeared is particularly impressive when it is recalled that space limitations compel the omission of all such projects costing less than \$10,000, for houses costing \$10,000 and over are few in number compared with those which cost less than that amount.

	Totals for August	Totals for January Aug. (Inc.)
Industrial Developments		
Airplane Plants, Stations, etc.	1	5
Bridges, Culverts, Viaducts	209	1841
Canning Plants	14	145
Clayworking Plants	16	95
Coal Mines and Coke Ovens	38	305
Concrete and Cement Plants	5	64
Cotton Compresses and Gins	26	186
Cottonseed Oil Mills	13	43
Drainage and Irrigation	21	123
Electric Light and Power Plants	98	599
Fertilizer Plants	8	56
Flour, Feed and Meal Mills	16	137
Foundry and Machine Plants	13	188
Gas and Oil Developments	84	685
Ice and Cold Storage Plants	27	231
Iron and Steel Plants	2	17
Land Developments	155	1338
Lumber Enterprises	43	466
Metal-Working Plants	2	145
Mining	15	177
Miscellaneous Construction	73	377
Miscellaneous Enterprises	387	3253
Motor Cars, Garages, Tires, etc.	144	960
Railways and Street Railways	11	74
Railway Shops, Terminals, Roundhouses, etc.	8	38
Road and Street Construction	677	5619
Sewer Construction	108	688
Sh'pbuilding Plants	0	8
Telephone Systems	25	141
Textile Mills	52	435
Water-Works	126	761
Woodworking	26	329
	2443	19,529
Building		
Association and Fraternal	38	262
Bank and Office	65	508
Churches	132	1016
City and County	117	451
Dwellings	336	2312
Government and State	14	95
Hospitals, Sanitariums, etc.	61	329
Hotels and Apartments	110	992
Miscellaneous	57	327
Railway Stations, Sheds, etc.	11	86
Schools	425	2241
Stores	108	1167
Theatres	14	119
Warehouses	44	284
	1592	10,129
Financial		
Corporations	110	752
New Securities	436	2926
	546	3678
Machinery, Proposals and Supplies Wanted		
	611	5472
TOTALS	5192	38,808
Fire Damage		
	119	1094
	5311	39,902

10,000 Acres of Timber Land Purchased at Reported Consideration of \$2,000,000.

A big timber and sawmill deal, embracing 10,000 acres of virgin long leaf yellow pine timber, sawmill plant and other facilities, has been consummated by the L. A. Cowan Lumber Co., which operates mills at Reba and Walley, both in Mississippi. The consideration is reported at \$2,000,000.

In connection with the deal, the L. A. Cowan Lumber Co. wires the MANUFACTURERS RECORD: "Bought Bothwell plant Robinson Land & Lumber Co., Bothwell, consisting of sawmill, dry kiln, planer, eight miles logging road and logging equipment, with 10,000 acres virgin long leaf timber."

BAD DAYS FOR EGYPTIAN COTTON.

How the United States Benefits.

Manchester, England, August 30—[Special.]—In his report on the economic and financial situation of Egypt, E. H. Mulock, the British Commercial agent, says that a far more significant and disquietening feature of cotton prices during the period under review is the narrowing of the margin that normally exists between the values of Sakellaridis and Ashmouni on the one hand and between that of Sakellaridis and American cotton on the other. The normal difference between the fully good fair grade of the two chief varieties of Egyptian cotton is from 10 tal. to 12 tal. per cantar for both spot and futures, but during 1922 that margin fell from about 9 tal. in January to about 6 tal. in December, and dropped as low as 2 tal. in February, 1923, rising again to about 3 tal. on March 31st.

A still more serious situation arises as a result of the narrowing of the premium between good fair Sakellaridis and fully good middling American cotton. During 1922 the maximum weekly difference in dollars per cantar between the prices at Liverpool fell from 18.32 dollars on January 6 to 5.45 dollars on December 1, while the minimum fell from 11.89 dollars in May to 3.70 dollars in December. Similarly, as regards maximum weekly spot prices in pence per pound at Liverpool, the margin of 9.11d on January 6, 1922 for Sakel stood at 20.50d and American at 11.39d, and fell to 2.40d on December 8, for Sakel had declined to 16.75d, and American had risen to 14.35d. It may be of interest to note that on November 10 when American reached the highest weekly spot price recorded for the year 1922 namely 15.65d, Sakel only stood at 18.40d thus giving a margin of only 2.75d.

Mr. Mulock continues to report:

"The effect of this state of affairs on the economic situation of Egypt would be far reaching if it tends to increase the cultivation of Ashmouni and shorter staple cottons on a considerable scale at the expense of Sakel which can only hold its own so long as the margin of price is commensurate with the difference in yield per acre. Diminished cultivation of Sakel is therefore a contingency that must be envisaged, and may have to be faced as a result of a persistent lack of demand, or at best a fitful or unremunerative demand for this variety of cotton, which since it was introduced in 1911 has so far virtually superseded all other varieties, and assured Egypt's supremacy as a producer of cotton for the finer counts. The average for all Egyptian cotton growing areas in 1917-21 of the percentage of the total devoted to Sakel was 71.5. In 1922 it stood at 75.4."

The Utilization of Lignite as a New Source of Fuel.

Washington, September 4—Construction of an oven that turns lignite into a substance with similar heating properties to anthracite coal has resulted from experiments conducted by the Department of the Interior through the Bureau of Mines.

An appropriation of \$100,000 made by Congress for the purpose of investigating lignite was made four years ago. The Bureau of Mines made the discovery in cooperation with the Canadian Government and as a result lignite char should be available in the Northwest in periods of hard-coal famine that may occur in the future. In addition to the cooperation of the Canadian Government the University of North Dakota assisted in the investigation.

Of the nation's coal resources, it is estimated that 1,051,290,000,000 tons, or nearly one-third, are lignite. Of this lignite, 964,000,000,000 tons are in North and South Dakota and northwestern Montana, a territory with a rigorous winter climate, and which annually imports large tonnages of anthracite and bituminous coal with an average railway haul of 1000 miles. Texas and Louisiana also have great quantities of lignite.

The lignite of the Northwest is brown, dull, markedly

woody in texture, has no cooking quality, and carries a great percentage of moisture. Its disintegration on exposure is so rapid as largely to prevent its shipment any distance except during the excessively cold northern winters when it is, of course, frozen.

Lignite takes fire quickly from spontaneous combustion, so that its safe storage in even small quantities is exceedingly difficult. It does not "coke," in the sense that bituminous coal cokes, but rather crumbles when being carbonized or when thrown into the fire, and this gives rise to difficulties in firing and substantial loss, as unburned fuel, through the grate bars.

Experiments have been made by various agencies in the past looking toward the utilization of the northwestern lignites in carbonized or powdered form or in the form of briquets. While all this experimental work has held some promise of success, the commercial development of these vast fields of lignite has not been worked out. An act of Congress passed in 1919, appropriated the sum of \$100,000 for an investigation by the Department of the Interior, through the Bureau of Mines, to determine the commercial practicability of producing a benefited solid fuel from lignite. As a result of the bureau's experimental work, a carbonizing oven, which has every indication of being a practical, commercial oven, was designed, constructed, and operated during the summer of 1922. Quantities of the oven's product, known as lignite char, were tested at the Pittsburgh experiment station of the bureau and found to possess heating properties very similar to those of anthracite coal.

The Canadian Government has expended nearly \$1,000,000 in conducting a program of exhaustive research looking toward the production of benefited solid fuel from lignite, and has obtained a vast fund of information which has been of great value to the Bureau of Mines in its study of the subject. The Canadian authorities, after seeing the Bureau of Mines carbonization oven in operation, decided to construct a similar oven and to give it a thorough test. These Canadian tests of the Bureau of Mines oven have been highly successful, and the Canadian engineers conducting the experiments have reported to the Department of Mines at Ottawa that the oven is a practical, commercial oven, now past the experimental stage.

Experiments have been conducted by the Interior Department, at the Bureau of Mines station in Pittsburgh, looking toward the development of suitable grates for the utilization of lignite char. Efforts of the Interior Department are now being directed toward the adoption of the new method of lignite carbonization by some commercial concern in order to make the benefits of this investigation available to the coal-consuming public.

Contract Awarded for \$650,000 Shrine Temple.

Louisville, Ky.—The Shriners' Building Committee, Paul Compton, chairman, has awarded contract to C. A. Koerner & Co. of Louisville for the erection of the building to be erected here for Kosair Temple at a cost of \$650,000. This structure will be for the club and hotel section, 216 by 200 feet, seven stories in part, of reinforced concrete with an exterior of semi-glaze finished terra cotta, and composition roof. There will be 135 hotel rooms and a banquet hall in the basement to seat 2500. The ultimate cost of the building will be about \$1,500,000. Joseph & Joseph of Louisville are the architects.

The Department of the Interior has recently issued Bulletin 751-B, presenting such facts and theories on the Pershing oil field in Osage County, Oklahoma, as have been determined to date. The work is as yet far from completion.

Savannah Gas Company to Make Extensive Enlargements.

Savannah, Ga., September 8—[Special.]—The Savannah Gas Co. will make enlargements and extensive improvements in its plant and service facilities, permission having been given by the Georgia Public Service Commission to issue \$1,850,000 worth of new capital stock, and \$600,000 worth of first mortgage bonds. These issues will enable the company to retire outstanding bonds becoming due, as well as to improve its general facilities.

The Citizens and Southern bank of Savannah took up the entire \$600,000 issue of bonds, and the company has already made arrangements to liquidate old bonds as fast as they become due.

Big Coal Power Plant Completed.

Keystone, W. Va., September 8—[Special.]—One of the largest and most modern coal power plants in the Pocahontas field, the new power house of the Keystone Coal & Coke Co., has been completed and is now in commission. Construction work was started several years ago but due to the war and inability of the company to obtain materials, completion of the plant was delayed. It has a concrete stack rising 216 feet above the ground, the building housing the plant being 60x105 feet of gray sandstone material.

The plant is equipped with a water testing and filtering system for the boilers and with automatic stokers. It will generate 1000 K. V. A. furnishing enough current for use in the mines and for lighting the company's dwellings.

Will Build \$750,000 Carbon Black and Gasoline Plant.

Monroe, La., September 8—[Special.]—The construction of a 4-unit carbon plant, gasoline extraction plant, and other necessary buildings, all estimated to cost \$750,000, will be started at once by the Magnolia Carbon Co. of Monroe, which has organized with a capital stock of \$500,000. The plant will be erected by day labor.

Officers of the company are V. M. Davis, president, Ruston, La.; W. L. Ethridge, secretary, and Travis Oliver, treasurer, both of Monroe.

Co-Operative Methods Bring Better Prices to Georgia Cotton Growers.

Atlanta, Ga., September 10—[Special.]—The Georgia Cotton Growers' Cooperative Association obtained for its members the highest price of any association in the South, according to its annual report just made public, with a price per pound of 26.03 cents to individual member growers, or a gross return of 27.06 cents per pound on all cotton sold.

The membership also greatly increased, the gain for the season amounting to 23,318, bringing the total up to 40,000.

In a comparison with the growth of other cooperatives in the South, it was found that the Georgia Cotton Growers' Association had advanced more than 9000 over the next largest cooperative. There are twelve cotton growing associations in the South, with an aggregate membership of approximately 226,000, and during the fiscal year just closed, these associations handled over a million bales of cotton.

Most of these bales were pooled on the Sapiro plan, about 146,000 members cooperating in this manner.

No estimate can be made of the number of bales that will go through the Georgia association's hands this season, but with its greatly increased membership, strength and efficiency, there is no doubt that there will be a substantial increase in the number of bales sold through it.

Manufacturing Machine for Drying Sand—Company Plans Factory at Keystone.

Keystone, W. Va., September 8—[Special.]—The French Sand Dryer Co. has been organized by Jacob Spector, C. S. French, S. A. Christie, J. E. Cruise and J. T. Whelden and is engaged in the manufacture of a machine for drying sand. The product is now being manufactured at Pulaski, Va. but those interested in the plant are looking over sites at Keystone with a view to erecting a factory.

Monthly Report of Steel Ingot Production.

The basis of the monthly report of the steel ingot production was changed in June by including reports from a larger number of companies so that the figures represent over 95 per cent of the total production. The reports for previous months of 1923, as shown in the accompanying tables have been revised and put upon this new basis.

MONTHLY PRODUCTION OF STEEL INGOTS, JANUARY, 1922, TO DECEMBER, 1922.

Reported by companies which made 84.15 per cent of the steel ingot production in 1922.

Months	Open-hearth	Bessemer	All Other	Monthly Production Companies Reporting	Calculated Monthly Production All Companies	No. of Working Days	Approximate Daily Production Companies Gross Tons
1922							
January	1,260,809	331,851	822	1,593,482	1,891,857	26	72,764
February	1,395,835	348,571	616	1,745,022	2,071,772	24	86,324
March	1,918,570	451,386	795	2,370,751	2,814,667	27	104,247
April	1,997,465	445,939	1,109	2,444,513	2,902,240	25	116,090
May	2,214,774	494,893	1,474	2,711,141	3,218,794	27	119,215
June	2,143,708	487,851	2,918	2,634,477	3,127,775	26	120,299
July	2,020,572	464,047	2,485	2,487,104	2,952,806	25	118,112
August	1,807,310	404,379	2,893	2,214,582	2,629,256	27	97,380
September	1,911,147	460,127	2,505	2,373,779	2,818,261	26	108,395
October	2,352,207	518,010	2,198	2,872,415	3,410,265	26	131,164
November	2,360,903	525,945	2,449	2,889,297	3,430,309	26	131,935
December	2,241,104	536,214	2,572	2,779,890	3,300,416	25	132,017
Total	23,624,404	5,469,213	22,836	29,116,453	34,568,418	310	111,511

MONTHLY PRODUCTION OF STEEL INGOTS, JANUARY, 1923, TO AUGUST, 1923.

Reported for 1923 by companies which made 95.35 per cent of the steel ingot production in 1922.

Months	Open-hearth	Bessemer	All Other	Monthly Production Companies Reporting	Calculated Monthly Production All Companies	No. of Working Days	Approximate Daily Production Companies Gross Tons
1923							
January	2,906,892	728,270	9,467	3,644,629	3,822,369	27	141,569
February	2,613,564	669,903	10,797	3,294,264	3,454,918	24	143,955
March	3,046,309	799,525	12,841	3,858,675	4,046,854	27	149,883
April	2,974,579	772,485	13,933	3,760,997	3,944,412	25	157,776
May	3,136,558	847,418	16,719	4,000,695	4,195,800	27	155,400
June	2,821,239	737,845	15,483	3,574,567	3,748,890	26	144,188
July	2,658,449*	680,884	11,496	3,350,829*	3,514,241*	25	140,570*
August	2,797,962	701,059	9,326	3,508,347	3,679,441	27	136,276
8 Months	22,955,552	5,937,389	100,062	28,993,003	30,406,925	208	146,187

* Revised.

THE IRON AND STEEL SITUATION

Steel Market Remains Sluggish—Current Buying Keeps Production Up Fairly Well.

Pittsburgh, Pa., September 10—[Special.]—September has not, thus far at least, brought the predicted increase in steel buying. While it may be said that the month is young, it is quite certain that there will be disappointment if a decidedly more active market does not develop. For more than a month past there has been reported an improved tone in the market and an increased confidence on the part of buyers. While such references encouraged the trade at the time, there must be definite improvement this month or there will be disappointment. The market would be better off without any prediction of improvement than with a prediction that is not verified.

It must be understood that while the steel market may properly be described as relatively dull there is a very considerable volume of business being placed from day to day. In fact, it is this current buying that has maintained the operation of a number of mills, mills that had rather light order books a couple months ago. Production on the whole has been moderately well sustained, on account of this buying, but there has not been buying to keep all mills going. Some mills, which entered this relatively dull period with full order books, have received relatively little business as they could not make the quick deliveries sought, and thus the buying has not been what would be requisite if all the mills needed business. As time passes additional mills require early delivery business, and increased buying must come or steel production will fall off sharply.

There has been some decrease in production to date. While the August report on steel ingot production is not issued yet, the information as to pig iron is more or less indicative, as steel production and pig iron production cannot fluctuate far apart. With slight successive decreases in pig iron in June and July, August brought a further and larger decrease, about 7 per cent, and the rate now is something like 4 per cent below the average during August. All told, pig iron production is off about 15 per cent from its highest level, while there is the important point that the fall has been increasingly rapid month by month. Thus operations in the iron and steel industry are not fully sustained after all.

Thursday, September 6, the American Sheet & Tin Plate Company (Steel Corporation) opened fourth quarter order books, at unchanged prices, just as has been expected, as follows: Tin plate, \$5.50 per base box, 100-pound cokes; blue annealed sheets, 3.00c; black sheets, 3.85c; galvanized sheets, 5.00c; automobile sheets, 5.35c. A few independents were impatient, and made some sales before the leading interest made its opening, though ordinarily the independents wait for the Steel Corporation to take the lead.

In tin plate there is no heavy demand, but there will no doubt be fair buying, particularly as some demand for oil plates has banked up. Prospects are that there will be heavy exports of oil, in tin plate containers, for some time to come. The leading interest will not need to sell much tin plate for the quarter, since it will carry over about six weeks of work from this quarter, partly because practically all customers specified contracts in full and partly because production was restricted by shortage of skilled labor at the hot mills. Some of the independent tin mills will carry over some business. One independent, however, has quite a stock. The leading interest will carry over about a month's work in sheets, while some of the independents will carry over a little. Except in automobile sheets, the sheet demand is steady, but not strenuous as it was six months ago.

Finished steel prices are unchanged.

Connellsville coke has stiffened somewhat more, chiefly by

reason of buying of heating coke by eastern dealers on account of the anthracite suspension. Heating coke is 4.75, furnace coke \$5.00 to \$5.25 and foundry coke \$6.00 to \$6.50.

Four or five merchant furnaces in this territory have banked or blown out in the past few days or will by the end of this week, having piled as much iron as they care to carry. Buying increases slightly from week to week but is still light. Prices are if anything a trifle firmer, and have not changed for weeks past, being as follows: Bessemer, \$26.50; basic, \$25; foundry and malleable, \$25 to \$26, f. o. b. valley furnaces, with \$1.77 freight to Pittsburgh.

Various Hopeful Factors Cause Birmingham to Look for a Turn for the Better.

Birmingham, Ala., September 10—[Special.]—Lower prices obtaining, melt of product increasing in the home territory, consumers renewing instructions for deliveries on old contracts and inquiries which indicate a need for iron bring about a better feeling in the Southern pig iron market, with furnace interests now hopeful that a turn for the better all around is setting in. The drop from \$27 to \$24 per ton, No. 2 foundry, which was acknowledged by all furnace interests, did not cause any great activity, just as was said by some of these interests when it was heard that consumers were waiting for concessions.

In the home territory sanitary pipe makers are beginning to start up plants as some business is coming into sight and a few foundries are adding to their activity right along. The pressure pipe makers, stove foundries and radiator works maintain their reputation as capacity operations and the melt in this direction has been steady.

Numerous inquiries have been received since the iron prices were lowered and as heretofore, there are rumors that the new low price is even being cut. Then production will not be cut very much more. The Sloss-Sheffield Steel & Iron Company will get its two furnaces recently blown out in shape for operation again. The Gulf States Steel Company is pushing the work of repairing on its single blast furnace at Gadsden and in a few weeks iron will be coming from that maker. The Tennessee Coal, Iron & Railroad Company will resume operation at the blast furnace at Bessemer where ferromanganese was produced when there is indication of need of that product. The Shelby Iron Company is repairing its Shelby charcoal furnace and within 60 days will be ready to start it up again. The Oxmoor furnace of the T. C. I. will hardly be started up again until the labor situation improves and that does not appear to be in sight for some time yet.

The surplus stock of iron on yards, over 100,000 tons, will be worked off some before the end of the year, it is believed, as the instructions now being received from consumers to ship on old contracts and the new business coming in are together slightly in excess of the make. But two interests have any heavy amount of iron on the yards and these two companies apparently are not alarmed as to the amount.

The blooming mill of the Ensley steel plant of the Tennessee Coal, Iron & Railroad Company is back in operation after a shut down of a week for repairs to the motor apparatus. There is a strong demand for the products of the Ensley mills and every department has been on a steady run for some time.

The coke market is still weak, the quotations around \$8 for foundry coke and production being maintained. By-product coke is in fairly good demand but with the pig iron market looking up there is hope that improvement will be noted shortly.

The Tennessee Coal, Iron & Railroad Company has plans under consideration for the erection of 50 houses at West-

field and other places in the Fairfield section of the district to provide homes for workmen already here and to be brought in. Efforts are being made to bring in additional labor.

The coal production in Alabama is being increased right along, the larger consumers taking some coal on contracts placed in the past. The production now is more than 370,000 tons weekly.

The scrap iron and steel market is very quiet and dealers are being told that pig iron prices are not at such great differences with some of the old material quotations.

PIG IRON

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$24.00 to \$25.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$24.50 to \$25.50; iron of 2.75 to 3.25 per cent silicon, \$25.00 to \$26.00; iron of 3.25 to 3.75 per cent silicon, \$25.50 to \$26.50; iron of 3.75 to 4.25 per cent silicon, \$26.00 to \$27.00; charcoal iron, f. o. b. furnaces, \$33.00 to \$34.00.

OLD MATERIAL

Old steel axles	.....	\$19.00	to	\$20.00
Old iron axles	.....	23.00	to	24.00
Old steel rails	.....	16.00	to	17.00
Heavy melting steel	.....	14.50	to	15.00
No. 1 R. R. wrought	.....	14.50	to	15.00
No. 1 cast	.....	19.00	to	20.00
Stove plate	.....	16.00	to	17.00
Old car wheels	.....	18.00	to	18.50
Old tramcar wheels	.....	19.00	to	20.00
Machine shop turnings	.....	7.00	to	8.00
Cast iron borings	.....	8.50	to	9.00
Cast iron borings (Chem.)	.....	18.00	to	19.00

United States Steel Statement on Change in Hours of Labor.

The following statement on the reduction in the number of hours of labor in the steel industry has been issued by Elbert H. Gary, Chairman, United States Steel Corporation:

"At the time the directors of the American Iron and Steel Institute publicly stated that total elimination of the twelve-hour day would be immediately commenced it was said that employees connected with continuous process would be reduced from twelve to eight hours and that their wage rates would be so adjusted as to afford earnings equivalent to a 25 per cent increase in hourly and base rates; also that all other workmen would be on ten hours or less and their present hourly and base rates would be continued, though whenever it should be practicable, by promotions or changes in position, daily earnings would be accordingly adjusted.

"Since that time the industry has proceeded as rapidly as possible to bring about changes of hours and also to make such changes in position and otherwise as would permit equitable adjustments in regard to the ten-hour men. However, as time has elapsed, it appears that there is a larger number of ten-hour men reduced from twelve hours, not connected with continuous process, than it was then expected. Consequently, there is now a considerable number of ten-hour men, some of whom formerly worked twelve hours and others on a straight ten-hour day basis, and it seems to the employers that there should promptly be made adjustments in regard to the wages of these workmen.

"In deciding the question of adjustments as related to the twelve-hour men it was deemed fair to 'split the difference' between employer and employee. That is, the twelve-hour men should have their hours of work decreased to eight hours, but would receive pay for ten hours on the basis of the old rate per hour, and that the employer should bear the extra cost thereby created. This was deemed by all concerned to be fair and just.

"Now it is proposed to 'split the difference' between the employer and employee concerning the ten-hour day, that is, to pay the workmen compensation for eleven hours at the old rate per hour. This decision is considered equitable and will place the ten-hour men on a parity with the eight-hour men.

"Existing conditions will not permit a general increase of wage rates. The adjustments which have been and are being made, as suggested, arise entirely from the circumstances growing out of the total elimination of the twelve-hour day."

RAILROADS

Weekly Record of Car Loadings Again Broken.

The record for weekly loadings of freight on the railroads was again broken during the week ended August 25 when the total of 1,069,932 cars was attained, this being nearly 29,000 cars greater than in the week of July 28 when the previous record was made. This new record was also more than 51,000 cars in excess of the record made during the autumn of 1920.

Loadings of merchandise and miscellaneous freight are running higher than ever, the total for the week ended August 25 being over 606,000 cars or more than 4000 cars in excess of the previous record made last fall, besides being over 16,000 cars greater than the week ended August 18 of this year. Loadings of other classes of freight are also large, loadings of coal for the week exceeding 203,000 cars, an increase of 14,000 cars over the previous week.

Notwithstanding the fact that freight loadings on the railroads during the week were the greatest ever known there were nearly 75,000 surplus freight cars in good repair and immediately available for use, showing greatly increased car service efficiency.

Lumber Railroad Will Now Serve Coal Mines.

Castleman Valley Railroad is the new name adopted for the Northern Maryland & Tidewater Railroad since its purchase by interests concerned in the Morgart Coal Mining Corporation was approved by the Interstate Commerce Commission and the Public Service Commission of Maryland. This short line of 14 miles was formerly the Jennings Railroad and was built by the Jennings Lumber Company to carry out timber to a connection with a Baltimore & Ohio Railroad branch at Niverton, Pa., which branch reaches the main line at Salisbury Junction, Pa. The southern end of this new railroad is at Jennings, Md., and it is now intended to be a coal railroad. Wm. A. Morgart, of Cumberland, Md., is its president as he is of the coal company, which has about 7000 acres of coal lands in the northern part of Garrett County, Md., where three mines are already opened and a fourth opening is being made. Connection may also be made with the Western Maryland Railroad which is close to the B. & O.

Amarillo and North Plains Railroad Plan.

Preliminary work has begun at Amarillo, Tex., looking to the construction of the proposed Amarillo & North Plains Railway. Although application for a charter has not yet been made an executive committee has been appointed and J. N. Riggs, the chairman, writes the MANUFACTURERS RECORD that it is proposed the first unit shall be about 100 miles long to a junction with another railroad. This part of the line will go through Moore, Hutchinson, Sherman, Hansford, Ochiltree and Lipscomb counties north of the Canadian River and comprising about 4,500,000 acres of fine, fertile land admirably adapted to agriculture and general live stock production. It is estimated that of this vast area 97 per cent is arable or tillable land. This entire territory, Mr. Riggs further remarks, is noteworthy for its adaptability to the production of wheat. H. Walter Blackburn is treasurer and Will N. Thompson, secretary, of the committee, with offices at 316-317 Blackburn Building, in Amarillo.

Contract for Reballasting.

Ball & Peters, of Little Rock, Ark., have, it is reported, been awarded a contract by the Missouri Pacific Railway for reballasting on its line between Gurdon and El Dorado, Ark., 66½ miles.

Sale of Railroad Expected to Result in Large Coal Development.

Huntington, W. Va., September 10—[Special.]—Following the purchase of the Kentucky, Rockcastle & Cumberland Railroad 12 miles long by Mr. and Mrs. W. M. Jones, of Huntington, Mr. and Mrs. H. B. Jones, and W. S. Hamilton, of Louisville, Ky., just announced by W. M. Jones, well known in eastern Kentucky coal circles, the road will be improved and made even more of a coal carrying road than it has been for several years. The line was built to permit development of 27,000 acres of timber land owned by the Turkey Foot Lumber Company, in Lee, Jackson and Owsley counties, Kentucky but after awhile, as mines in Lee county were opened, the road became a carrier for them and carried more coal than lumber and now as most of the timber has been cut the road has become almost exclusively a coal carrying line and is a feeder for the Louisville & Nashville railroad at Caryton, near Heidelberg, Ky.

It is now proposed by an increase of capital to extend the line to the Kentucky River opposite Heidelberg and to build docks there so that coal may be shipped to Cincinnati and Louisville markets by water as well as by rail. Besides, the new owners of the railroad will probably develop about 27,000 acres of coal land traversed by the line, having secured an option on this acreage. The coal is said to be of the finest quality found in Eastern Kentucky.

Southern Railroads Leading in Rate of Earnings.

The net operating income of the Class 1 railroads of the United States during the first seven months of this year was at the annual rate of 5.51 per cent on their tentative valuation according to an announcement from the Bureau of Railway Economics, Washington, D. C., which further stated that this income totaled \$528,219,300, or an increase of \$109,824,650 as compared with the same period of last year when the net operating income was at an annual rate of 4.46 per cent.

It is especially worthy of note that in the Southern railroad district net operating income for the seven months period this year was at the annual rate of 6.47 per cent, leading the several districts, for in the eastern district it was 6.40 per cent and in the western 4.17 per cent, but it is further stated that compilations show the annual rate of return of the railroads as a whole based on their property investment to have been but 4.83 per cent for the period.

In July, it is said, twenty-nine of the Class 1 railroads operated at a loss, eight being in the eastern district, five in the southern district and sixteen in the western district.

Miniature Train Shows Electric Signals.

Visitors to the Cincinnati Fall Festival and Industrial Exposition were greatly interested by the exhibit of the Southern Railway System, consisting of a miniature passenger train protected by electrically operated automatic block signals as in actual practice on its lines. The train is run on an oval track, with electric signals working. It consists of three coaches and an engine and is driven by electricity, taken from a third rail, though the locomotive is a model of the regular steam type.

Railroad to Asphalt Mines.

H. P. McMillan, of San Antonio, Tex., one of the incorporators and directors of the Asphalt Belt Railway Co., which proposes to build a line from near Pulliam, Tex., to the mines of the Texas Rock Asphalt Co., says that the line will be 18 miles long and of light construction. The asphalt is used extensively for building hard surfaced roads and also for street paving. The line will connect with the San Antonio, Uvalde & Gulf Railroad of which Mr. McMillan is auditor.

Encouraging Progressive Farming Along Rock Island Lines.

Arthur W. Large, agricultural agent of the Rock Island Lines, Chicago, Ill., has issued the official program of the "Great Enid-Rock Island Lines Agricultural and Community Life Institute" to be held at Enid, Oklahoma, September 13, 14 and 15 in the new convention hall. There will be three sessions daily open to everyone and numerous addresses will be made by experienced men on various matters of farming, stock raising, fruit and vegetable culture, dairying and other farm activities. Mr. Large is chairman and presiding officer of the Institute; the secretary is E. Harding, agent of the Rock Island Lines at Enid.

In this connection it should also be noted that the Rock Island Lines will donate the cost of trips to Chicago to the winners of Farm Boys and Girls Club Contests, according to announcement by L. M. Allen, vice-president and traffic manager, in recognition of the constructive work which is being done by 600,000 boys and girls enrolled in these clubs and by the agricultural colleges and the county agricultural agents under whose supervision the club work is conducted. A ticket will be given to one boy or one girl in each county during the period of the International Live Stock Exposition in Chicago December 1 to 8, 1923, the selection of winners to be made by proper authorities of the agricultural colleges in charge of this work in co-operation with the extension agents.

Railroad Financing Approved.

The Waco, Beaumont, Trinity & Sabine Railway Co., of Texas, of which R. C. Duff, of Houston, is president, has been authorized by the Interstate Commerce Commission to issue \$1,110,000 of first mortgage 6 per cent conditional interest bonds, \$60,000 of equipment trust notes, and \$1,063,000 of common capital stock. The bonds and the stock are to be used in payment for the lines acquired by the company. The notes are to pay for equipment.

The issue of \$500,000 of common stock and \$1,200,000 of 6 per cent bonds first mortgage by the Tennessee, Alabama & Georgia Railway Co. has been approved by the Interstate Commerce Commission.

To Extend the San Antonio Southern.

Forces are at work restoring the old grade of the San Antonio & Southern Railroad extension between Christine, Tex., and the Frio River, 23 miles, the object being to complete the road to a total length of about 30 miles as far as the proposed town of Simmons, Tex., and perhaps on to the new oil field at Calliham in Webb County. The railroad company has applied to the Interstate Commerce Commission for authority to construct the railroad all the way through but the present work is being done in accordance with permission given by the State several years ago although construction was abandoned during the financial disturbance caused by the World War.

New Equipment and Rails.

Kansas City Southern Railroad is having 10 Mallet type locomotives built at the Richmond works of the American Locomotive Co. At the same plant 2 Mountain type locomotives will be built for the Richmond, Fredericksburg & Potomac Railroad.

Among the rail orders recently placed with subsidiaries of the United States Steel Corporation are the following: Atlantic Coast Line, 35,000 tons; Louisville & Nashville Railroad, 30,000 tons; Norfolk & Western Railway, 28,000 tons; Illinois Central Railroad, 18,000 tons; Central of Georgia Railway, 16,000 tons.

GOOD ROADS AND STREETS

North Carolina Awards Nearly \$2,000,000 in Road Contracts—Work Includes 73 Miles Roads and Bridges.

Raleigh, N. C., September 10—[Special.]—Contracts have been awarded by the State Highway Commission here for the construction of a number of road projects in the state, together with bridges and structures, the mileage aggregating 73 and the cost of construction \$1,843,235. The work includes 9.96 miles of hard surfaced road in Perquimans County, Smith Bros., Dallas, Tex., contractors at \$224,691; 14.35 miles of hard surface in Pitt County, Groves Co. & Shepard, Duluth, Minn., at \$421,638; 8.23 miles of soil road in Franklin County, and 7.91 miles in Warren County, J. A. Marrow, Clarksville, Va., at \$55,465 and \$48,444, respectively, for roadway and structures.

For building 4.03 miles of hard surfaced road in Alamance County, the Ziegler-Dalton Construction Co., Junction City, Kan., was awarded contract at \$110,878; 8.22 miles of hard surfaced road in Rockingham County, Ziegler-Dalton Construction Co., at \$252,892, and for structures, J. L. Brinkley, Thomasville, N. C., at \$29,017; 15.4 miles of hard surfaced road in Anson and Union counties, James O. Heyworth, Chicago, at \$455,229; 4.95 miles of hard surfaced road in Buncombe County, Wilson Construction Co., Rutherfordton, N. C., at \$15,957 for roadway, and R. C. Stevens, Asheville, N. C., at \$18,357 for structures.

Contract was awarded to J. T. Gwathmey of Norfolk, Va., at \$12,256 for sheet piling for Williamston bridge in Martin County, and at \$18,411 for structures in Scotland County on route No. 20 between Laurinburg and the Richmond County line.

Virginia Lets Contracts for Over \$683,000—Will Build Nearly 20 Miles Roads and Several Bridges.

Richmond, Va.—Contracts have been awarded by the State Highway Commission for road and bridge construction in various sections of the state, aggregating \$683,177. The work will involve nearly 20 miles of roads and a number of bridges, the most important section being 9 miles of road located in Louisa and Albemarle counties on the Richmond-Staunton highway, for which Ellis, Brooks & Co. of Staunton were awarded contract at \$324,397. This contract does not include an overhead bridge over the Chesapeake & Ohio tracks at Cobham and bids for this will soon be invited.

Other contracts are as follows: Road in Elizabeth City County, 1.8 miles, Cannaway Hudgins Co., Hampton, Va., at \$46,367; 8.7 miles of grading and drainage in Dickenson County, McArthur & Hood, Huntington, W. Va., \$265,248; approaches to Craig Creek bridge, Preston & Pollard Co., Bedford, Va., \$8611; bridge over Piney River in Amherst and Nelson counties, Robert W. Curtis, Lynchburg, Va., \$14,260; bridge over Allen's Creek in Nelson County, Preston & Pollard Co., \$6852; bridge over South Anne River in Louisa County, H. H. George, Jr. & Son, Richmond, \$17,442; project F-222 in Campbell County, C. B. Gester, Greensboro, N. C.

Louisiana Awards Contracts for 19 Miles Roads.

Baton Rouge, La., September 8—[Special.]—Contracts have been awarded by the Louisiana Highway Commission for building three road projects aggregating 19 miles, all on the Natchitoches-Mansfield highway, the total cost being \$108,037. For federal aid project 101-A, 4.20 miles, and federal aid project 101-B, 9.262 miles, the Alexandria Contracting Co. of Alexandria, La., received contracts at \$33,040 and \$49,990, respectively. C. W. George of Arcadia, La. was awarded contract at \$25,007 for project 100-A, 5.539 miles.

Palm Beach County Invites Bids on 13 Miles of Roads.

West Palm Beach, Fla.—Sealed bids will be received until September 15 by the Board of County Commissioners of Palm Beach County for building six sections of hard surfaced roads in the county, making an aggregate of 13¼ miles. Three sections are known as roads Nos. 1, 2 and 3 in special road and bridge district No. 16, having a total of 8.045 miles. One section commences at the Broward County line and extends northerly to a bridge across the Boca Raton Inlet, a distance of 1.129 miles, while another, which is known as road No. 5 in special road and bridge district No. 16, is 2.04 miles. There will also be a section of 2.038 miles in the same district known as road No. 4.

Specifications and bidding blanks may be obtained from Charles H. Holstlaw, county engineer, the award of contracts on several of the projects being provisional upon the sale of bonds of the district.

Fayette County Road Contracts.

Fayetteville, W. Va., September 8—[Special.]—Fayette county has recently awarded contracts to pave the Fayetteville-Cold Run road and the Mt. Hope-Pax road, reference to which was made in the MANUFACTURERS RECORD two weeks ago. Contract for the former, covering 35,250 square yards, was awarded at Waugh Bros. of Fayetteville, and for the latter, 50,492 square yards to the Fidelity Construction Co. of Mt. Hope and J. M. Randish Co. of Huntington. Paving on the two roads, 21 miles in length, will be of asphalt macadam with Bermudez road asphalt as the binder.

Contract for paving the Oak Hill Longally road, 22,430 square yards, has also recently been awarded to Waugh Bros.

Kentucky Preparing Plans for 22 Miles of Roads.

Frankfort, Ky., September 8—[Special.]—Plans are being prepared by the State Highway Department here for the construction of 22 miles of roads, the improvements to be water-bound macadam, water-bound macadam surface treated, or bituminous macadam. One portion of the work covers 9.498 miles of the Richmond-Mt. Vernon road in Madison and Rockcastle counties, while another will embrace 12.60 miles of the Winchester-Stanton road from the east corporate limits of Winchester to the Powell County line. Both roads will be 18 feet wide.

Mecklenburg County Lets \$240,000 Road Contract.

Charlotte, N. C.—At an amount approximating \$240,000, the Mecklenburg County Highway Commission has awarded contract to the Noll Construction Co. of Lexington, N. C., for hard surfacing eight miles of the Lawyer's road, between Alexander's store and the Cabarrus County line. The road will be constructed according to plans and specifications of the State Highway Commission and will be 18 feet wide with a concrete base and asphalt surface. Work will begin at once.

\$250,000 Road Project in St. Lucie County.

Fort Pierce, Fla.—Bids have been opened by the State Road Department at Tallahassee for the construction of 7.12 miles of road in St. Lucie County, from Wabasso to Sebastian River. The construction will consist of a rock base, with bituminous macadam or plain concrete, and will cost about \$250,000. H. C. Green of Fort Pierce is the division engineer.

The Guilford County Highway Commission, W. C. Boren, chairman, Greensboro, N. C., has completed the last of the commission's road projects, for which a bond issue of \$2,000,000 was provided.

TEXTILE

Contract for Electrical Installation in New Weave Shed of Republic Cotton Mills.

Great Falls, S. C., September 8—[Special.]—Contract for the installation of electrical apparatus, power and light wiring in the new weave shed of the Republic Cotton Mills here, has been awarded to Huntington & Guerry of Greenville, S. C. The contract calls for the installation of 1000 one-half horse power loom motors and approximately 250 other small motors for individually driving warpers, winders, silk spinners and cloth room machinery, and also for the construction of a steel tower transmission line from the mill to the Great Falls hydro-electric plant of the Southern Power Co., substation, and for village lighting. The electrical equipment will be supplied by the Westinghouse Electric & Manufacturing Co. of Pittsburgh.

J. E. Sirrine & Co., of Greenville are the engineers for the construction of the weave shed, which is 627 by 237 feet, one story and basement, of reinforced concrete. There will also be a warehouse of 150 by 100 feet, of three compartments.

Arkansas Mill to Install 5000 Additional Spindles.

Helena, Ark.—Operating a total of 6656 ring spindles, the Delta Land Co. has ordered 5000 additional spindles for its cotton mill here. This company is a subsidiary of the Park-hill Manufacturing Co. of Fitchburg, Mass., and owns plantations in Phillips and other counties aggregating 35,000 acres. It grows the cotton required on its own plantations, spins it at the mill here and ships it to Fitchburg for weaving.

The present mill building is a two-story brick structure with 26,000 square feet of floor space, sufficiently large to accommodate the additional spindles which will be installed on the second floor. It is stated that further additions will be made and other operations will be moved to Helena soon after the present expansion. The company has purchased a number of dwellings for operatives and contemplates building others as needed.

Anniston Manufacturing Company Making Extensions.

Anniston, Ala., September 8—[Special.]—The Anniston Manufacturing Co. will make several changes to its mill building and add approximately 8000 square feet of floor space. J. E. Sirrine Co., of Greenville, S. C., are the engineers and have invited construction bids. When the extension is completed machinery will be re-arranged and new machinery will be added in the card room.

Bids Invited on Plant of Steele-Heddle Company.

Greenville, S. C., September 8—[Special.]—Plans and specifications for the construction of the plant here for the Steele-Heddle Manufacturing Co., of Philadelphia, have been distributed to contractors for estimates by J. E. Sirrine & Co., engineers of Greenville. The plans call for a reinforced concrete building, 120 by 60 feet, two stories and basement. It will be equipped for the manufacture of reeds, loom harness, drop wires and leno dousps.

Will Build Worsted Knitting Mills.

Chestertown, Md., September 8—[Special.]—The Chestertown Development Co., recently incorporated with a capital stock of \$10,000, will build a worsted knitting mill here, 60 by 140 feet, one story. It will probably install a locomotive type boiler suitable for heating the building.

Officers of the company are L. G. Brown, president; J. H. Sides, secretary, and H. F. Jefferson, treasurer.

Textile Company Will Establish Plant to Weave Fancy Dress Goods and Novelties.

Burlington, N. C.—The Queen Anne Textile Co. has incorporated with an authorized capital stock of \$1,000,000 for the purpose of establishing a plant here to weave fancy dress goods and novelties. The brick building formerly occupied by the United Finishing Mills has been secured by the new company and contract has been awarded for remodeling. Orders have also been placed for initial equipment.

Officers of the company are W. H. Moreton, Adams, Mass., president and general manager; John M. Cook, Burlington, vice-president; R. N. Cook, Graham, N. C., secretary and treasurer, and J. E. Eck, Gastonia, N. C., auditor.

Collier Mills Purchased—To Improve the Output.

The William Carter Company, Harris A. Carter, treasurer, Needham, Mass., which owns and operates textile mills in New England and North Carolina, has purchased the Collier Mills, Inc. of Barnesville, Ga. and will change the name to the Carter-Collier Co., the capital stock of the new company to be \$250,000 which will be increased as the demand justifies. Relative to the enterprise the William Carter Co. wires the MANUFACTURERS RECORD:

"We have purchased the Collier Mills, Inc. which will be known as the Collier-Carter Co. Their products will be improved but there will be no immediate or radical expansion of the business."

Contract Let for \$175,000 Cotton Storage Warehouse.

Spray, N. C., September 8—[Special.]—Contract has been awarded to the Leaksville Lumber Co. of Leaksville, N. C. by the Carolina Cotton & Woolen Mills Co. to erect a \$175,000 cotton storage warehouse here. The building will be 116 by 216 feet, five stories and basement, of reinforced concrete construction. It will have a composition roof, concrete floors and will be equipped with steel sash and trim and wire glass. Plans were prepared by the owner, who will handle details for the installation of elevators and lighting equipment.

Engineers Engaged for New \$400,000 Mill—Gaffney Enterprise to Operate 250 Looms.

Gaffney, S. C.—J. E. Sirrine & Co. of Greenville, S. C. have been engaged as engineers for the construction of the proposed \$400,000 cotton mill here which is being promoted by C. M. Smith and Major Henry C. Moore, reference to the enterprise having been made by the MANUFACTURERS RECORD in its issue of July 26. The new mill will house 250 looms and will manufacture fine cotton goods exclusively. Plans for organizing the company are said to be progressing satisfactorily.

Plan to Erect Cotton Mill.

Greenville, S. C.—A charter has been secured by the Wallace Manufacturing Co., Inc., of Greenville, which is capitalized at \$700,000, for the purpose of building a cotton mill near this city. Officers of the company include T. M. Marchant, president; W. H. Beattie, vice-president and treasurer, and R. A. Lybrand, secretary, all of Greenville.

Textile Mill Notes.

The Albany Textile Co. of Albany, Ala. will build a new mill which will approximately double its capacity. It will accommodate 80 looms.

The Poneemah Mills, Inc., of Lexington, N. C., has changed its name to Wabena Mills, Inc. This company is completing a cotton mill at Lexington.

LUMBER AND BUILDING MATERIALS

Lumber Movement Normal in All Departments.

Washington, September 6—Allowing for interference of Labor Day with the collection of lumber movement statistics, which resulted in fewer reporting mills, there was little change in the national lumber movement last week, says the National Lumber Manufacturers Association, although the available figures indicate some decline in activity. The industry appears to be in an almost perfectly normal condition in respect to new business, production and shipments. Of the 376 reporting mills, 358 have a normal production figure for the week, according to which current production was 107 per cent of normal, shipments 98 per cent thereof and orders 99 per cent. For all the reporting mills shipments were 89 per cent and orders also 89 per cent of production; for the Southern pine mills the corresponding percentages were 98 and 102, and for the West Coast mills 95 and 88.

Unfilled orders for Southern pine mills are not available, but those of 132 West Coast mills fell from 352,721,900 to 331,700,437, as compared with the previous week. The total volume of business of all reporting mills is considerably in excess of the corresponding period of last year. Unsold stocks of West Coast mills, as of July 1, are 137,460,000 feet as against 199,375,522 on January 1 last. Southern pine stocks on August 1 were 565,618,552 as against 545,164,493 feet July 1, and 522,898,131 January 1. Stocks of mills associated with the Hardwood Manufacturers Institute advanced from 389,352,000 feet July 1 to 406,560,000 August 1. Stocks of the Western Pine and California White & Sugar Pine Associations also gained noticeably.

The West Coast Lumbermen's Association reports from Seattle that last week's production was 23 per cent above normal, new business 12 per cent below production and shipments 8 per cent above new business. Forty per cent of all new business was for future water delivery, amounting to 38,734,842 feet; of which 27,478,539 was for domestic cargo delivery, and 11,256,303 export. New rail business amounted to 1719 cars. Of the week's lumber shipments 38 per cent moved by water, amounting to 39,823,084 feet; of which 27,691,708 moved coastwise and intercoastal. Rail shipments totaled 1929 cars. Unfilled domestic cargo orders totaled 145,-

076,756 feet, unfilled export 74,943,681, and unfilled rail trade orders were 5584 cars.

The California White and Sugar Pine Association reports all trade conditions normal. The California Redwood Association reports the demand considerably better than at any time in the past month. California and foreign markets are reported strong, and the drop in shipments is characterized as temporary.

The following table compares the lumber movement for the three weeks designated:

	Past Week	Corresponding Week 1922	Preceding Week 1923 (Revised)
Mills	376	357	405
Production	258,059,423	229,230,156	285,390,244
Shipments	229,199,505	211,429,040	247,948,590
Orders	229,228,471	200,685,405	247,224,407

For the first 35 weeks of 1923 and the corresponding weeks of 1922, the lumber movement of reporting mills was as follows:

	Production	Shipments	Orders
1923	8,705,549,351	8,702,646,458	8,135,029,930
1922	7,328,127,015	7,267,710,917	7,547,889,756
1923 Increase	1,377,422,336	1,434,935,541	587,140,174

Competition of Foreign Brick Felt in New York Market—General Construction Outlook Favorable.

Shipment of brick for the past month was well maintained according to the monthly digest of the Common Brick Manufacturers Association of America, which says:

"The depression in building is shown in the reports from the brick manufacturers of the country only in the new business on the books. The amount of brick shipped from the plants in July was approximately the same as in the preceding month, and the production of brick showed a slight increase. Ninety-three firms reporting, representing practically every section of the country, show unfilled orders on the books amounting to 342,719,000, which is a little more than 50,000,000 less than was recorded in the August 1 report, which reflected conditions on July 1. This drop is not serious at this season of the year. There is nothing discouraging in the current reports from manufacturers, and out of 76 who indicated future outlook for business, 20 were found in the "good" column, 48 viewed the outlook as "fair" and only 8 say it is "bad." Among the firms reporting only one plant was shut

LUMBER MOVEMENT FOR THIRTY-FIVE WEEKS, AND FOR THE WEEK ENDING SEPTEMBER 1.

	Production		Shipments		Orders	
	1923	1922	1923	1922	1923	1922
Southern Pine Association:						
Total	2,711,673,584	2,575,134,407	2,786,949,508	2,566,525,189	2,608,145,476	2,739,297,551
Week (141 mills)	80,611,129	74,958,261	78,897,480	72,808,648	81,993,994	58,172,708
West Coast Lumbermen's Assn:						
Total	3,466,239,216	2,833,057,658	3,694,201,999	2,771,421,586	3,513,796,413	2,814,228,718
Week (132 mills)	108,684,141	84,558,505	103,516,027	70,628,983	96,127,785	82,600,847
Western Pine Mfrs. Association:						
Total	983,528,000	767,135,000	880,094,000	874,366,000	810,300,000	990,975,000
Week (27 mills)	27,186,000	31,349,000	18,772,000	27,318,000	20,275,000	30,225,000
Calif. White & Sugar Pine Mfrs.:						
Total	*457,548,000	*224,525,000	*327,135,000	*167,439,000	*305,115,000	*200,148,000
Week (8 mills)	9,133,000	10,133,000	6,490,000	7,022,000	5,207,000	6,029,000
Calif. Redwood Association:						
Total	313,709,000	262,965,000	316,521,000	240,827,000	311,030,000	254,266,000
Week (15 mills)	9,712,000	9,122,000	6,355,000	10,541,000	10,798,000	7,009,000
North Carolina Pine Association:						
Total	208,178,421	287,911,323	321,280,250	278,221,206	254,369,141	283,636,487
Week (43 mills)	7,968,723	5,275,880	6,596,997	7,709,146	7,624,692	4,988,850
Northern Hemlock & Hardwood:						
(Softwood) Total	88,615,000	70,931,000	88,859,000	96,495,000	79,311,000	92,119,000
Week	No report	1,426,000	No report	2,096,000	No report	1,626,000
Northern Pine Mfrs. Association:						
Total	376,058,130	306,467,627	287,605,701	272,415,936	252,962,900	263,219,000
Week (10 mills)	14,764,430	12,407,510	8,572,001	13,305,263	7,202,000	10,034,000
General Total for 35 Weeks:						
(Softwood)	8,705,549,351	7,328,127,015	8,702,646,458	7,267,710,917	8,135,029,930	7,547,889,756
Northern Hemlock & Hardwood:						
(Hardwood) 34 weeks	101,705,000	.....	102,880,000	.....	93,365,000	.....
General Total for Week	258,059,423	229,290,136	229,199,505	211,429,040	229,228,471	200,685,405

* Sum of unrevised weekly totals; represents about 40% total association production.

down during the month of July, all others shut down being for less than the full month and that principally for repairs.

"The decrease in unfilled orders is quite evenly distributed over all of the Eastern, Southern and Middle Western territory. In California there is shown an increase in orders on the books and a better condition is reflected in the other coast states and in the Southwest.

"There is no price change recorded in the past thirty days.

"For the first time during the business career of anyone now manufacturing brick some competition is felt from foreign made brick. This is apparent so far only in the New York market, where considerable quantities of brick from Germany and Holland are reported to be coming in. It is stated that these brick can be purchased on board ship at Germany and Holland ports for \$4.00 a thousand. It is apparent at once that American manufacturers cannot compete with this low production cost even after transportation and handling on this side of the ocean has been absorbed. This competition is not likely to reach far inland, but would affect Atlantic ports unless the American manufacturers in those locations find some protection.

"American made brick still is preferred by the builders in New York and is in ready demand even at a higher price than the foreign made brick.

"The New York market still is strongest of all the Eastern markets and there is no indication at present of serious interference with the production on the Hudson River during the balance of the building season.

"Viewing construction as a whole, there is a favorable outlook. While the latter half of 1923 does not promise to equal the nearly three billion dollar volume piled up during the first six months of the year, there is every indication of continued building at high volume throughout all of 1924. Much building yet is needed and the pressure has been relieved just enough during the past two months to give greater encouragement for planning 1924 construction."

Shipments Above Recent Weeks.

The Southern Pine Association for the week ended August 31 reports as follows on 141 mills:

	Cars	Feet
Orders on hand beginning of week	11,066	234,698,794
Orders received during week	3,866	81,993,994
Total	14,932	316,692,788
Shipments during week	3,720	78,897,480

Orders on hand end of week	11,212	237,795,308
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Production for the week was 80,611,120 feet. Shipments were 1,713,649 feet below production or 2.13 per cent. Orders were 1,382,865 feet above production or 1.72 per cent. Orders were 3.92 per cent or 3,096,514 feet above shipments. The week was 8,077,418 feet or 9.11 per cent below normal production, and orders were 7.55 per cent or 6,694,553 feet below normal production. The increase in orders on hand amounted to 3,096,514 feet or 1.32 per cent.

Orders Show Slight Increase.

The North Carolina Pine Association reports as follows on 42 mills for the week ending September 1:

	Total Feet
Orders	7,339,692
Shipments	6,356,502
Production	7,443,077
Normal Production	11,568,000

The orders were 2 per cent above shipments, 1 per cent below actual production and 36 per cent below normal production. Shipments were 14 per cent below actual production and 45 per cent below normal production. Actual production was 35 per cent below normal. The week shows an increase in orders of 809,883 feet or 1 per cent.

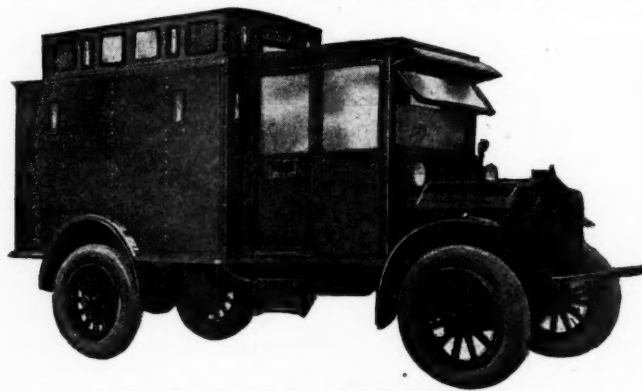
To Build \$300,000 Petroleum Refining Plant.

Louisville, Ky.—Work will soon be in progress on a \$300,000 refining plant to be erected here by the Louisville Petroleum Refining Co. of which W. M. Mitchell is president and general manager. The plant will be located on a tract of land west of the State fair grounds near the Ohio River and will have a capacity of 2500 barrels per day. Railroad tracks have been built to the site and it is expected that the plant will be completed in six months.

MECHANICAL

Armored Car for Payroll Guard.

An armored car body to protect men carrying large payrolls from attacks by bandits is shown herewith and it embodies the unique advantage of an arrangement of mechanism which can be operated by the men within the money compartment of the vehicle so that they can throw out the clutch of the motor and apply the brakes, despite any action of the driver whom bandits may command to keep the car moving. The builders of this body, the Providence Body Company, of Providence, R. I., have, it is stated, produced this car body only after the most searching study of condi-



CAR IS BUILT OF BULLET PROOF STEEL AND GLASS
tions surrounding the use of payroll cars and of attacks which have been made upon such vehicles at different times and places, with the result that they believe this is thoroughly efficient.

These bodies are made upon a steel frame with armored plates both inside and outside, the space between the inner and outer plates being filled with layers of dense felt. There are ample ventilators for the comfort of the men within the car and yet the ventilators, it is stated, as well as the body, cannot be pierced by bullets of .45-inch caliber. Moreover, the ventilators are protected on the inside with spring covers to guard against any attack with tear or gas bombs and the body is also fireproof. It is designed so that the guards within can fire upon attackers from any angle and from two levels.

The portholes are closed with bullet-proof glass and will open outwardly upon the pressure of weapons from the inside, but immediately that a weapon is withdrawn after discharge a porthole closes automatically so that occupants of the car are not in the least degree exposed to the fire of bandits. The money compartment is separate from the driver's compartment although communication is possible through a sliding door. The upper part of the windshield overlaps the lower part completely protecting the driver, who is thus not exposed to bullets. No one can ride on the outside of the car, for the body encloses the fenders and the steps fold up when the car is closed. Doors are locked on the inside. The car is lighted and heated and is so strong that it can be overturned without damage. Inside the car is sufficiently high for men to stand erect, although seats are provided for them.

Freight Rates Reduced in Georgia.

According to a report from Atlanta the Georgia Public Service Commission has ordered a revision of freight rates on the railroads within the state so as to equalize charges where hauls are of similar length. The new rates are to take effect September 15 and they cover iron and steel and products thereof, groceries, canned goods, peanuts, etc. Reductions are made, it is stated, ranging from 10 to 50 per cent.

Construction Department

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained. Further facts about any incomplete or incorrect item reported in these columns are always appreciated.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers, and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$20.00 a year.

Bridges, Culverts and Viaducts

Ala., Sheffield—Southern R. R. Co., R. Hayes, Structural Engr., Washington, D. C., plans expending \$7500 to build bridge near Florence, Sheffield, Tusculumbia highway.

Ark., Pine Bluff—Plum Bayou Road Dist., Jefferson County, will erect 4 bridges. Details under Road and Street Construction.

D. C., Washington—Details under Road and Street Construction.

Fla., St. Petersburg—W. S. Harrell will erect bridge across Blind Pass, connecting Long key to island on north. Address County Commrs.

Fla., West Palm Beach—Trustees of Internal Improvement Fund, and Florida East Coast Ry. Co., H. M. Brown, Structural Engr., St. Augustine, Fla., plan building drawbridge over West Palm Beach canal, about 4 mi. south of West Palm Beach; Improvement fund to pay half.

Ky., Paintsville—Johnson County plans building bridge across Paint Creek at mouth of Barnets Creek, on Paintsville-Salyersville road; replaces bridge to be removed to Fish Trap. Address County Commrs.

La., Port Allen—Louisiana Highway Comm., Raymond Bldg., Baton Rouge, will receive bids until Oct. 2 to build 34 reinforced concrete culverts, from 4x3 ft. to 48x8 ft.; also 50-ft. steel girder span, and 60-ft. steel low truss span on reinforced concrete abutments; 145,000 lbs. reinforcing steel, and 72,000 lbs. structural steel; plans, etc., on file; J. M. Fourmy, State Highway Engr.

Miss., Jackson—Hinds County Board of Supvrs. plans building \$100,000 bridge over Pearl River, near Jackson, also plans paving; contemplates \$240,000 bond issue.

Miss., Macon—Noxubee County will receive bids until Oct. 1 for 8 bridges as follows:

3 concrete bridges on Brooksville and Cliftonville road, near Deerbrook; concrete spillway at Owl Creek, on Brewer road, 1 mi. north of John Clark's place; steel bridge from Macon and Louisville road over Hashuqua Creek, to 2½ mi. from Mashulaville on Mashulaville and Factory road; wooden bridge over branch on Macon and Memphis road, about ¼ mi. from Alabama line; brick culvert on Binion road; wooden bridge over Joe's Creek, on Allgood Mill road, about 2 mi. west of Macon depot; John A. Tyson, Chancery Clk.

North Carolina—State Highway Comm., Raleigh, N. C., let contract to J. T. Gwathmey, Norfolk, Va., at \$12,256.24 for sheet piling for Williamston Bridge, Martin County, Project No. 108.

N. C., Durham—Durham County Commrs. will build culvert on Swift St.

Okla., Avant—Osage County Commrs. let contract to I. E. Beecher, Fairfax, to build 15 concrete box culverts on Wolverine-Avant road; also will erect 30-ft. concrete

girder bridge and two 18-ft. concrete beam bridges on Pawhuska-Bartlettville highway.

Okla., Blackwell—Kay County plans expending \$81,000 to build 546-ft. bridge across Chikaskia River near Blackwell; U. S. Road Dept. granted \$30,000 federal aid; will also build 14 concrete culverts along State Highway to replace 2 small bridges, being removed. Address County Commrs.

S. C., Charleston—Charleston County, Sanitary and Drainage Comm., let contract to Sanford & Brooks Co., Commerce & Water Sts., Baltimore, Md., at \$1,067,000 to build concrete bridge over Ashley River at foot of Spring St. (Lately noted.)

Tenn., Chattanooga—Hamilton County and Tennessee Electric Power Co., B. C. Edgar, V.-P., Chattanooga, plan building concrete bridge over Chattanooga Creek on Whiteside St.; 40-ft. roadway; 10-ft. sidewalks on each side. Address County Commrs.

Tenn., Chattanooga—E. Brook Brantley interested in building viaduct over Southern Ry. tracks from intersection of King & Market Sts. to Alabama St. Address City Comm.

Tenn., Columbia—Maury County let contract to J. R. Shackelford, Mt. Pleasant, Tenn., to build 2 bridges as follows: 30-ft. span over Carter's Creek at Dark Mill on Carter's Creek pike; two 30-ft. spans over Gibson's Branch, on Mooresville pike.

Tex., Ballinger—Runnels County plans building low water bridge over Fuzzy Creek, on State Highway No. 30, south of Ballinger; State Highway Comm., Austin, granted \$3000 State Aid; J. E. Pirie, County Engr.; Paul Tremmie, County Judge.

Tex., Canadian—Aemphill County will receive bids until Sept. 15 for concrete girder span bridge across Washington River; 14 spans, 24-ft. 6-in. each, on concrete piling; 84,234 lbs. reinforcing steel; plans, etc., from State Highway Engr., Austin, or R. H. Spiller, County Engr., Canadian.

Tex., Dickens—Dickens County plans building bridge across Duck Creek on State Highway No. 18; cost \$10,000; J. W. Alger, County Engr.; H. A. C. Brummett, County Judge.

Virginia—State Highway Dept., Richmond, Va., let contracts for 4 bridge projects as follows: S-196, Route 22, approaches to Craig Creek Bridges, to Preston and Pollard, Bedford, Va., at \$8611.02; 248-B, Amherst and Nelson counties, over Piney River, to Robert W. Curtis, Lynchburg, Va., at \$14,260.91; 248-C, Nelson County, over Allen's Creek, to Preston and Pollard, at \$6852.25; 276-B, Louisa County, over South Anna River, to H. H. George, Jr. & Son, Richmond, at \$17,442.45; H. G. Shirley, State Highway Comr.

Clayworking Plants

Ky., Ashland—Kentucky Fire Brick Corp., capital \$500,000, incorporated by A. L. and A. J. Russell and others.

Tex., Stamford—Fraser Brick Co. of Dallas, acquired plant of Stamford Brick Co., and will expend \$50,000 in improvements.

Coal Mines and Coke Ovens

D. C., Washington—L. E. White Coal Co., 733 12th St., N. W., capital \$300,000, incorporated by L. E. White, R. B. Dickey and others.

Ky., Lexington—Turner Elkhorn Coal Co., capital \$100,000, incorporated by Joseph F. Claybrooke, Bardstown, Ky.; Morris W. Burrett, Springfield, Ky.

Tenn., Chattanooga—Kelleys Ferry Coal Co., W. J. Nixon, Pres.-Treas., 322 First National Bank Bldg., has 1280 acres coal under development; daily output to be about 300 to 400 tons; install general mining equipment; increased capital to \$25,000. (See Machinery Wanted—Mining Machinery.)

Va., Graham—Pocahontas Coal Land Corp., capital \$700,000, incorporated with R. M. Crockett, Pres.; C. L. Shufflebarger, Sec.

W. Va., Wheeling—Unity Coal Co., incorporated by Geo. A. Blackford, Z. F. Robertson, both Wheeling; O. M. O'Donnell, Martins Ferry, Ohio.

Cotton Compresses and Gins

Ala., Leroy—Leroy Gin & Mill Co., incorporated by J. D. Boswell, R. G. Pearson and others.

S. C., Ninety Six—Ninety Six Manufacturing Co., capital \$100,000, incorporated with H. P. Galphin, Pres.; R. A. Watson, Sec.; manufacture products of cotton and cotton seed, and operate cotton gin.

Tex., Della—Della Farmers' Gin Co., incorporated by J. H. Cochrum, W. B. Harring and others.

Tex., Flint—Flint Gin Co., incorporated by W. O. Craft, C. J. Brogan and others.

Tex., Lubbock—Lubbock Cotton Compress Co. will install additional storage sheds, fire walls, concrete driveways, ventilated floors for storage of cotton, improved fire protection, etc.; cost \$150,000.

Tex., Rusk—Martindale & Pickle Gin Co. will erect \$20,000 cotton gin.

Drainage and Irrigation

Fla., Tallahassee—Everglades Drainage Dist. Commrs. has approved plans to begin work in the Pahokee drainage district, comprising about 22,000 acres in upper everglades district; Karl Riddle, Chief Engr., West Palm Beach, Fla.

La., Port Allen—West Baton Rouge Parish, Board of Commrs. of Choctow Basin Drainage Dist. will dredge 12½ mi. canal, moving 1,000,000 yds. dirt; voted \$104,000 bonds. (Lately noted.)

Mo., Foley—Sandy Creek Drainage Dist., Hy. Heinemann, Pres., Board of Supervisors, receives bids until Sept. 15 to construct pumping station and equipment; work con-

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

sists of 16x24 ft. building for vertical engine or 22x22 ft. building for horizontal engine, frame, asphalt rolled sheet roofing; 45 h.p. vertical or horizontal oil engine; centrifugal pump, 7500 g.p.m. capacity; one oil storage tank; excavation of concrete; plans and specifications at Bank of Foley, Foley, Mo., Office of T. N. Jacob, 1900 Railway Exchange Bldg., and office of H. H. Humphrey, Chemical Bldg., both of St. Louis.

Electric Light and Power Plants

Ala., Montgomery—Alabama Power Co. petitioned Alabama Public Service Co. for authority to construct 48 mile electric transmission line from Montgomery to Greenville.

Ark., Birdell—Central Power & Light Co., W. S. McCall, Pres., 1420 Chemical Bldg., St. Louis, Mo., reported to expend about \$600,000 in improvements and development of water power on Spring River.

Fla., DeLeon Springs—Details under Land Developments.

Fla., Jacksonville—Details under Water Works.

Fla., Lake Worth—Details under Water Works.

Fla., Ocala—Details under Land Developments.

Fla., Pahokee—Details under Water Works.

Ga., Newton—Baker County Power Co., Dr. W. E. Saunders, Sec., will rebuild dam across Notachaway Creek; Hardaway Construction Co., Contrs., Columbus, Ga.; Mees & Mees, Engrs., Charlotte, N. C. (Previously noted.)

Ga., Tallapoosa—Tallapoosa River Power & Textile Corp., capital \$500,000, incorporated by W. W. Summerlin of Camp Hill, Ala. and associates plan development of 1000 acres at Camp; will cut tunnel through hill at horse shoe bend of Tallapoosa River, a distance of about 140 ft. and then dam river at bend flooding about 300 acres of land, creating lake with ample reserve of water and at same time develop 1000 primary and 1000 secondary horse power; will erect textile mill with capacity of 20,000 spindles either at Muscadine or Tallapoosa; company also plans development of resort to be known as Camp.

La., Welsh—City, Jno. W. Armstrong, Mayor, votes Sept. 17 on \$20,000 bonds for enlarging light plant.

Md., Baltimore—Stockholders of Pennsylvania Water & Power Co., Charles E. F. Clarke, Pres., 40 Wall St., New York, will meet October 30 to consider proposition of authorizing issue of \$50,000,000 5% bonds to provide for refunding \$11,878,000 of bonds

outstanding and for future extensions and additions to company's properties.

Md., North Beach—North Beach Electric Light & Power Co., capital \$50,000, incorporated by Augustus C. Breitenstein, J. Fendall Cain, Jr., and others.

Mo., Kansas City—Kansas City Power & Light Co. will erect \$250,000 automatic alternating current substation corner of Sixth and Penn Sts.

Mo., Republic—City will construct light and power plant, voted \$35,000 bonds. Address The Mayor. (Lately noted.)

Mo., St. Louis—Details under Land Development.

N. C., Asheville—Pigeon River Power Company, Waynesville, N. C., has applied to Federal Power Commission, Colonel William Kelly, Chief Engineer, Washington, D. C., for authority to develop water power on Pigeon River. The commission wires Manufacturers Record: "Pigeon River Power Co. proposes a dam one hundred and fifty feet high in Pigeon River; tunnel five miles to power house at Waterville on North Carolina-Tennessee line; total fall 650 feet; initial installation 50,000 horse power; ultimate development 150,000 horse power; sell to Asheville and Knoxville and bring industrial development for remainder. Address F. R. Weller, Mills Building, Washington, D. C. Mr. Weller is Consulting Engineer for the company.

N. C., Bethel—Town, J. W. Rook, Mayor, will receive bids until Sept. 20 for materials and construction of electric transmission line from Greenville to Bethel; Ed. E. Williams, Engr., Greenville, N. C.

N. C., Gastonia—Details under Water Works.

S. C., Johnston—Johnston-Bouknight Electric Co., incorporated with J. A. Bouknight, Pres.; W. M. Bouknight, Sec.

Tenn., Knoxville—Details under Land Developments.

Tenn., Lawrenceburg—City has had plans prepared by Freeland, Roberts, Engrs., Nashville, Tenn. for \$80,000 dam and power station at Shoal Creek; will soon call for bids.

Tenn., Rockwood—Details under Road and Street Construction.

Tex., Dallas—Details under Land Developments.

Tex., Franklin—Western Service Corp., acquired municipal electric plant; will construct high power line from plant at Calvert to Franklin.

W. Va., Charleston—Details under Land Developments.

W. Va., Logan—Kentucky & West Virginia

Power Co. is considering construction of dam across the Guyan River; will construct 6-ft. dam across the river to Little Island, creating basin of average depth of 12 ft., approximately 250 ft. wide and half mile long.

Fertilizer Plants.

S. C., Anderson—Anderson Fertilizer Co., capital \$150,000, incorporated with J. H. Anderson, Pres.; W. C. Gilmer, Sec.; has acquired plant of Anderson Phosphate & Oil Co.

Mo., Kansas City—Gasoline Products Co., Inc., capital \$50,000, incorporated with L. V. Drake, V.-P.; W. S. Hood, Sec.

Flour, Feed and Meal Mills

Mo., Independence—Good Morn Products Co., capital \$100,000, incorporated by J. A. Whitehead, George P. Kinberling and others; will manufacture prepared flour.

W. Va., Ronceverte—Ronceverte Milling Co., capital \$50,000, incorporated by R. K. Ford, W. H. VanPelt, both Ronceverte; C. F. Coffman, Harrisonburg, Va.

Foundry and Machine Plants

Md., Baltimore—Acorn Iron Works, Russell and Alluvian Sts., capital \$25,000, incorporated by Charles Roche, John Klein and others.

Miss., Gulfport—Lawler-Knauck Manufacturing Co., capital \$16,000, incorporated by S. C. Lawler and John T. Hayes, both Gulfport; Charles E. Knauck; manufacture machinery implements and tools.

Tenn., Memphis—R. E. Smith Electric Machine Co., capital \$20,000, incorporated by R. E. Smith, W. S. Council, A. L. Collins.

Tex., Beaumont—Diamond Foundry & Machine Works, capital \$14,000, incorporated by Geo. W. Barrett, L. P. Hacker and others.

W. Va., Keystone—French Sand Dryer Co., organized by C. S. French, S. A. Christie, J. E. Cruise, and others; contemplates erecting foundry to manufacture dryers.

Gas and Oil Enterprises

Ala., Birmingham—Industrial Gas Corp., Brewer Dixon, Pres., will increase capital; has been granted gas franchise in North Birmingham.

Ark., El Dorado—Nate Parris Co., Inc., capital \$750,000, incorporated with Nathan E. Parris, Pres.; H. J. Parris, Sec.-Treas.

Ark., El Dorado—Acme Royalty & Producing Co., capital \$150,000, incorporated by R. D. Ellis, H. M. Bihm and others.

Ga., Savannah—Savannah Gas Co., was granted authority by Georgia Public Service

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MANUFACTURERS RECORD

BALTIMORE, MD.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Conn. to issue \$1,850,000 capital stock and \$600,000 bonds to improve facilities and retire outstanding bonds.

Ky., Bowling Green—Baker-Jones Oil Co., increased capital from \$30,000 to \$50,000.

Ky., Louisville—Louisville Petroleum Refining Co., W. M. Mitchell, Pres. and Gen. Mgr., will erect oil refining plant; capacity

La., Monroe—Magnolia Carbon Co., of Monroe (lately noted incorporated, capital \$500,000) organized with W. M. Davis, Pres., Ruston, La.; W. L. Ethridge, Sec., Monroe; will erect four unit carbon plant, gasoline extraction plant and all necessary buildings, etc.; total cost estimated at \$750,000; manufacture carbon black and gasoline; W. H. Price, Const. Engr., Swartz, La.; address machinery proposals to W. L. Ethridge, Sec. 2500 bbls. daily; cost \$300,000.

Md., Baltimore—Maratex Operating Corp., 3 E. Lexington St., capital \$100,000, incorporated by Richard E. Preece, Wm. M. Travers and others.

Md., Fairfield—Prudential Oil Corp., will erect two tanks, 120x40-ft. each, at 4th and 7th Sts.; cost \$80,000.

Mo., St. Charles—St. Charles Gas Co., capital \$160,000, incorporated by J. C. Atwood, R. B. Glenn and others.

Okla., Cushing—Ozark Pipe Line Corp., let contract to United Steel Co., Kansas City, Mo., to construct 2 additional 55,000 bbl. steel storage tanks.

Okla., Jennings—First National Bank of Tulsa, Tulsa, Okla. reported to have purchased Great American Refining Co.'s plant.

Tex., Austin—A. L. Ehrlich will erect 3 galvanized iron storage tanks at Fifth and Comal Sts.; each tank will have a capacity of 240 bbls.

Tex., Beaumont—Beaumont Gas Light Co. has consolidated with Southwestern Gas & Electric Co. of Shreveport, La.; M. T. Walker, local Mgr.

Tex., Eastland—Freeborn & Little Oil Co. reported to erect \$100,000 carbon black plant in Eastland oil fields.

Tex., Fort Worth—Pyle-Williams Co., capital \$60,000, incorporated by R. Q. Williams, D. R. Pyle and others.

Tex., Houston—Younger Oil Corp., capital \$15,000, incorporated by J. I. Younger, W. A. R. Heline and others.

Tex., Houston—Ville Platte Petroleum Co., capital \$15,000, incorporated by J. E. Ludeau, A. L. Edwards and others.

Tex., Marshall—Producer Refining Co., will rebuild burned plant; W. O. Gough in charge of construction.

Tex., Mildred—Humble Oil & Refining Co., of Corsicana, Tex., reported to erect casing head gasoline plant with capacity of 5,000,000 ft. daily.

Tex., Orange—Orange Oil Production Co., capital \$60,000, incorporated by W. C. A. Beneke, E. W. Bancroft and others.

Tex., Waco—Waco Petroleum Co., capital \$10,000, incorporated with F. M. Compton, Pres.; J. K. Rose, Treas.; has 4600 acres of land under lease at Downsview and will develop.

Va., Front Royal—Western Maryland Oil Co., capital \$50,000, incorporated with O. R. Bordon, Pres.; R. E. Herr, Eec.

W. Va., Charleston—Details under Land Developments.

W. Va., Clarksburg—Van Horn Oil & Gas Co., capital \$25,000, incorporated by J. L. Walton, T. J. Nicewander and others.

W. Va., Huntington—Wright Oil Service Co., capital \$10,000, incorporated by J. H. Wilson, J. W. Wright and others.

Ice and Cold-Storage Plants

Ala., Gadsden—J. R. McCleskey, Otto Aricola and others have purchased the Gadsden Ice & Coal Co., will remodel and improve; also plans installing ice cream factory.

Fla., Pahokee—Details under Water Works.

S. C., Union—Consolidated Ice & Fuel Co., R. L. McNally, Treas., will convert their steam distilled water plant to an electric raw water plant, invite bids on machinery. (See Machinery Wanted—Ice Plant Machinery.)

Tenn., Chattanooga—Atlantic Ice & Coal Corp., W. Hynes, local Mgr. has begun work on the plant improvements, expansion consists of several units, the first one being 4 stories, each floor 80x80-ft. (Lately noted.)

Tex., Colorado—O. Lambeth, will erect \$100,000 ice and cold storage plant.

Tex. Corsicana—Navarro Ice Co. let contract to John Carson and John Gallahan both of Corsicana, to erect brick plant on South 12th St. (Lately noted incorporated, capital \$40,000.)

Tex., El Paso—Lukli Investment Co., Inc., Frank M. Lukli, Pres., Box 318, R. F. D. No. 1, will erect ice plant, daily capacity 20 tons; invite bids on ice machinery. (See Machinery Wanted—Ice Machinery.)

Tex., Snyder—Snyder Utilities Co. will erect first unit, consisting of 50x90-ft. building of a modern cold storage plant; cost \$90,000.

Tex., Winters—O. D. Dillingham will erect ice plant; cost \$75,000.

Va., Bristol—Bristol Ice & Coal Co., capital \$50,000, organized with R. F. Wagner, Pres., will erect 1-story, 60x100-ft. ice plant, Commonwealth Ave. at Euclid Ave., brick and steel construction; install modern machinery.

Land Development

Ala., Birmingham—Urban Realty Co., incorporated with R. D. Johnson, Pres. Treas.; R. L. Gleen, Sec.

Fla., DeLeon Springs—Florida Ferneries, Inc., lately noted incorporated with \$25,000 capital, Eugene Pierson, Pres., has 50-acre tract and will develop for ferneries; erect dwellings, install Delco system of lighting; construct cement streets; will also erect bungalows; amount to be expended at present time \$20,000; later plans further development.

Fla., DeLand—DeLand Investment Co., incorporated with J. A. Scarlett, Pres.; Clayton C. Codrington, Sec.

Fla., Fort Lauderdale—Ocean Heights Development Co., capital \$25,000, incorporated with J. D. Butler, Pres.; Forest R. Shipley, Sec.

Fla., Haines City—Ridge Properties, Inc., capital \$10,000, chartered with Eugene C. Bryan, Pres.; E. C. Bryan, Sec.-Treas.

Fla., Jacksonville—Bonair Beach Corp., capital \$100,000, incorporated with David D. Vincent, Pres.; James W. Mack, Sec.

Fla., Jacksonville—Lila M. White contemplates expending about \$100,000 in improvements to Reed's subdivision.

Fla., Lake City—Calhoun Development Co., capital \$10,000, incorporated with R. L. Moore, Pres.; E. C. Calhoun, Sec.

Fla., Ocala—Marion County Estates, Inc., lately noted incorporated with \$25,000 capital, organized with C. E. Kiplinger, Pres.; Harry Fitzgerald, Sec.; will develop 300 acres for citrus groves and homes; install city electric lights and water works; roads and streets, etc.; cost \$25,000.

Fla., St. Petersburg—August A. Burchy ac-

quired 2050 ft. of Gulf frontage land and will develop for subdivision.

Fla., Tampa—Howard Cole of New York, (offices at Sebring and Okeechobee, Fla.) will develop 200,000 acres of Indian Prairie, Highlands and Glades County lands; will drain, construct hard surfaced roads, etc.; D. W. Stevenson, in charge of work.

Fla., Tavares—Florida Home & Investment Co., James A. Gillespie, Pres., has acquired and will develop tract of land along Lake Dora; will develop portion for homesite, constructing roads, etc. and the remainder for citrus groves.

Fla., Zolfo—Zolfo Springs Citrus Grove Assn., incorporated with Jos. Grews, Pres.; J. S. Carlton, Sr., Sec.

Ga., Atlanta—City defeated \$2,000,000 bonds for park improvements. Address The Mayor. (Lately noted.)

Ga., Tallapoosa—Details under Electric Light and Power Plants.

La., New Orleans—Capt. W. L. Brown, of Covington, La., will develop 18-hole golf course in St. Tammany's Parish.

Md., Baltimore—Progressive Realty Co., 210 Dolphin St., capital \$50,000, incorporated by Ballak L. Lawson, James H. Wade and others.

Md., Baltimore—Derby Manor Corp., Inc., 1204 Fidelity Bldg., capital \$30,000, incorporated by Edward B. Henry, Raymond J. Arthur, John B. Brown.

Md., Baltimore—West Virginia Land Co., 600 Equitable Bldg., capital \$200,000, incorporated by Mayer L. Bloom, Daniel Ellison and others.

Mo., Kansas City—Alamo-Donna Farms Co., capital \$150,000, incorporated by G. F. Schroeder, C. G. Brown and others.

Mo., St. Louis—Herman Pockels Realty Co., capital \$80,000, incorporated by Herman Pockels, 2322 Sydney St., Agnes Kollme, 2354 Park Ave. and others.

Mo., St. Louis—James A. Hodges, 3127 S. Grand Boulevard has acquired 11½ acres on Loughborough Ave and will develop for subdivision; will install sewers, water, electric facilities, lay asphalt streets, sidewalks, curbs, gutters, etc.

N. C., Charlotte—W. R. Foreman Co., capital \$100,000, incorporated by W. R. Foreman, W. G. Myers and others.

S. C., Florence—City acquired 20 acre site, will develop for park. Address The Mayor.

Tenn., Chattanooga—E. F. Hubble and associates acquired and will develop 40 acres for subdivision.

Tenn., Knoxville—J. C. Africa and John M. Leek will develop Swan-Land golf and country club; are interested in incorporating company with \$150,000 capital; have option on 300 acres of land; will construct lake covering 23 acres, bathing beach and boat houses, etc.; will build dam 18-ft. high and across top will be bridge connecting with system of roads; 150 acre golf course with club house; reservoir to supply water and power house to furnish electricity also included in plans.

Tex., Dallas—Fred W. Wilson, Pres. of Wilson Construction Co., has acquired 40-acre tract and will develop for residential section; will install water, sewer, lights, roads, etc.

Tex., Dallas—B. C. Lucas will soon let contract for approximately \$20,000 of improvements to addition in Highland Park; Myers & Noyes, Engrs.

Tex., Dallas—Meyers & Noyes, Consit. Engrs., let contract for following improvements in Preston Place addition: to H. C.

Hughes, for grading, to Lynch Miller for sewers and water mains; to Klein Bros. for concrete work.

Tex., Tyler—R. W. Fair will develop 5 acres for homesite; will install modern conveniences, construct sidewalks, grade streets, etc.

Va., Norfolk—Ducol Realty Co., Inc., capital \$15,000, incorporated with Geo. F. Wilkinson, Pres.; W. V. Farant, Sec.

Va., Norfolk—Old Dominion Farm, Inc., capital \$100,000, chartered with Charles M. Barnett, Pres., New York; Joseph Barnett, Sec. Lynnhaven, Va.

Va., Radford—Radford Home & Realty Corp., capital \$25,000, incorporated with J. P. McConnell, Pres.; O. A. Parsons, Sec.

Va., Richmond—Landfield Realty Corp., capital \$50,000, incorporated with C. C. Satterfield, Pres.; C. A. Thurston, Sec.

W. Va., Charleston—R. S. Carr Realty Co., organized by R. G. Hubbard, W. J. Weakland and others have 12 acre tract and will develop for homesite, will install water, gas, electricity, sewers, construct streets, etc.

W. Va., Charleston—Wayne Realty Co., capital \$10,000, incorporated by H. B. Hauer, Frank Herb and others.

W. Va., Clarksburg—Potomac Improvement Co., capital \$25,000, incorporated by J. F. Strother F. F. Freeman, J. M. Butcher.

W. Va., Follansbee—Follansbee Cemetery Assn., incorporated by J. E. Montgomery, J. V. Balch, both Follansbee; J. H. Shope, Salem, Ohio.

Lumber Enterprises

Ark., Hot Springs—Dierks Lumber Co. has acquired plant and holdings of the Valley Mill Co.; will operate.

Fla., Manatee—Updegraff Lumber Co. have acquired 290 x 100-ft. strip of land on the Seaboard railroad, having switch running length of tract, (near present plant) will erect office and 22 x 200-ft. lumber shed; will about double present space.

Ga., Cordele—Crisp County Lumber Co., W. A. Thompson, Pres., will rebuild plant burned at loss of \$65,000.

Ga., Savannah—Savannah River Lumber Co., I. H. Petty, Pres.-Gen. Mgr., will erect single band plant near or at Savannah for cutting hardwood timber; have let contract for all machinery and equipment. (Lately noted.)

Ky., Louisville—Bond Clarkson Co., capital \$10,000, incorporated by O. S. Bond, Ben S. Clarkson and others.

Ky., Owensboro—D. C. Stimson Lumber Co., capital \$300,000, incorporated by D. C. and P. M. Stimson, both Owensboro; N. A. Stimson, Campbellsville, Ky.

Md., Frostburg—Laurel Run Lumber Co., 159 W. Main St., capital \$25,000, incorporated by Joseph T. Blake, Thos. B. Cessna and others.

Miss., Bothwell—L. A. Cowan Lumber Co., Reba, Miss., have purchased from Robinson Land & Lumber Co., of Mobile, Ala., more than 10,000 acres of yellow pine timber in Greene County including saw mill, dry kiln and planer, with daily capacity of 70,000 ft.; will operate.

Mo., Springfield—Osborn Roscoe Lumber Co., capital \$100,000, incorporated by O. N. Lynch, F. R. Hawkins and others.

Mo., St. Louis—Black River Tie & Timber Co., capital \$100,000, incorporated by O. A. Palmer, S. E. Grodsky and others.

N. C., Charlotte—Jackson Lumber Co., capital \$50,000, incorporated by H. T. Jackson, D. C. Deal and others.

N. C., Morehead City—Bogue Sound Lumber Co., capital \$50,000, incorporated by W. C. and E. H. Gorman and others.

Tex., Houston—Reynolds-West Lumber Co., capital \$400,000, incorporated by J. W. Reynolds, C. B. Granbury, T. H. Monroe.

Mining

Ga., Savannah—Gordon Kaolin Co., capital \$145,000, incorporated by F. H. Oppen, F. P. McIntire and others.

Md., Oakland—Victory Mining Co., capital \$50,000, incorporated by Gilmor S. Hamill, Ettore Principini and others.

Tex., Calvert—Lignite—Madison Oil & Coal Co., Hall Etter, Pres., of Houston, Tex., has acquired lignite mine, will install modern mining machinery; contemplated daily output 2000 tons.

Miscellaneous Construction

Ala., Mobile—Seawall—City contemplates building seawall, breakwaters, or other means of protection. Address The Mayor.

Fla., Palm Beach County—Wharves—The Brown Co., Portland, Me., will construct wharves for use of its fleet of ocean-going vessels; has acquired 27½ acres of submerged lands.

La., Mandeville—Seawall, etc.—City will construct seawall, dredge ravine and hard-surface streets; has \$32,000 available; contemplates voting on \$25,000 bonds for the opening of Bayou Castaigne which will improve the harbor. Address The Mayor.

La., New Iberia—Canal—C. Girard, Pres., Police Jury, Iberia Parish, let contract to Ennis Construction Co. to build canal connecting Lake Faussee Pointe and Bayou Teche. (Bids lately noted.)

La., New Orleans—Levees—United States Engineers opened bids for construction of about 455,000 cu. yds. of earthwork in the Atchafalaya, Pontchartrain and Lake Borgne Dist.; the following are lowest bidders: for Allendale levee, 269,000 cu. yds., Lower Coast Construction Co. at \$75,320; for Pontchartrain levee district, Waterloo levee, 160,000 cu. yds., Gross Construction Co. at \$48,000; for Monsecur levee, 1000 cu. yds., Union & Grau at \$2900; for Point-a-la-Hache levee, 14,000 cu. yds., H. H. Schneider at \$3920.

La., New Orleans—Swimming Pool—New Orleans Country Club, William Henderson, Pres., let contract to Doullut & Williams Co., Inc., 816 Howard Ave., New Orleans, to build 40x120-ft. swimming pool, tile lined with tile gangway around the pool; will erect complete filter house for pressure filters, pumps and chlorine sterilizing equipment, will have capacity to filter and sterilize water in pool every 10 hrs., water to be kept in continual circulation; install complete system of lighting; estimated cost \$60,000; Orloff Henry, Const. Engr.

La., Shreveport—Caddo Levee Board let following contracts:

To Constant & Co., Shreveport to construct the Brown Place and Slough levee, involves the moving of 80,000 yds. dirt; to Taylor & White, Woodside, La., for Shreve Island levee work requiring 25,000 yds.; and to Douglas, Burt and Crow, of Shreveport, for widening Douglas Island drainage ditch from a point 300 yds. north of the Tim Mooring bridge to Cross Bayou.

N. C., Wrightsville Beach, P. O. Wilmington—Jetties—Wrightsville Beach Jetty Comm. contemplates building two additional jetties at seaside resort; cost divided between New Hanover County Commrs., Tidewater Power Co., and town of Wrightsville Beach.

Tenn., Knoxville—Lake—Details under Land Developments.

Tex., Galveston—Seawall Protection—United States Engineering Dept., let contract to Dittlinger Lime Co., of New Braunfels, Tex., to furnish 2500 tons lime stone to be placed at junction of the seawall and the south jetty end of present project.

Tex., Houston—Atlantic Gulf & Pacific Dredging Co. has received contract at \$287,000 to remove 740,000 cu. yds. of dirt and waste material from site of Houston's new municipal wharves.

W. Va., Huntington—Inclinator—City contemplates installing inclinator plant, costing \$35,000. Address The Mayor.

Miscellaneous Enterprises

Ala., Birmingham—Southern Signal Co., L. E. Clough, Pres., increased capital from \$30,000 to \$75,000.

Ala., Mobile—Eastern Shore Transportation Co., Capt. M. A. Bowen, Mgr., increased capital from \$75,000 to \$150,000.

Ala., Montgomery—Gulf States Chemical & Refining Co., 608 American Trust Bldg., Birmingham, Ala., has building; will install tanks, pumps, agitators, filter presses, dryers, evaporator, pulverizer, etc.; will manufacture calcium arsenate, daily output 20 tons; open machinery bids Sept. 15. Address John M. Gallalee, care of company. Lately noted increased capital to \$300,000. (See Machinery Wanted—Chemical and Refining Plant Equipment.)

Ala., Selma—Southern Repair & Supply Co. of Leeds, Ala. will remove plant to Selma.

Ark., Fort Smith—Fort Smith Chemical Co., D. A. Dyer, Pres. contemplates later to build plant to manufacture salt cake used by glass manufacturers. (Lately noted.)

Ark., Little Rock—Arkansas Bauxite Products Co., incorporated with C. D. Hyten, Pres.; George W. Goodman, Sec.-Treas.; will manufacture alum, etc.

Fla., Centerhill—Beville & Oldham Co., capital \$25,000, incorporated with J. S. Beville, Pres.; G. G. Oldham, Sec.

Fla., Everglades—Everglades Publishing Co., D. W. McLeod, Sec.-Treas. and Mgr. (lately noted incorporated) will probably occupy building already erected, if any construction will be by local contractors; install machinery for printing weekly newspaper. (See Machinery Wanted—Printing Machinery.)

Fla., Greensboro—Electrical Manufacturing & Developing Co., capital \$60,000, incorporated with Wm. Petschel, Pres.; E. C. Behrens, Sec.

Fla., Jacksonville—Inglish Construction Co., incorporated with G. G. Dockrall, Pres.; J. A. Harding, Sec.

Fla., Miami—Miami X-Ray Laboratory, capital \$30,000, incorporated with Gerard Raap, Pres.; E. H. Spach, Sec.-Treas.

Fla., Miami—Fishkin Hotel Co., capital \$100,000, incorporated with Ida Fishkin, Pres.; Jeanette Freidin, Sec.

Fla., Miami—Polar Water Co., capital \$20,000, incorporated with J. K. Thompson, Pres.; Norberg Thompson, Sec.

Fla., Orlando—Sunlight Bottling Co., capital \$10,000, incorporated with A. L. Simmons, Pres.; R. J. Thomas, Sec.

Fla., St. Petersburg—Melvin-Newman Co., capital \$10,000, incorporated by W. F. Newman, W. J. Melvin and others.

Fla., Tampa—Tobacco Products Machinery Co., capital \$15,000, incorporated with W. H. Haupt, Pres.; C. F. Brenner, Sec.

Fla., West Palm Beach—Typewriter & Office Supply Co., capital \$10,000, incorporated with John E. Richardson, Pres.; Nettie O. Richardson, Sec.

Ga., Bolton—National Paper Co., of Atlanta, Ga. let contract to West Point Iron Works, West Point, Ga. to erect \$25,000 mill construction building; tar and gravel roofing; wood floors; John Hill, Archt., Atlanta, Ga.

Ga., Dawson—Dr. L. Lamar, temporary Chmn. of the Terrell County Poultry Assn., contemplates establishing community hatchery, 10,000 egg capacity.

Ga., Savannah—Western Paper Makers Chemical Co. have acquired and repaired old site of the Grecian-American Turpentine plant, will establish rosin sizing plant; the company has plants in operation in Jacksonville and Pensacola, Fla. and other cities; O. E. Scott, local Mgr.; A. L. Poidevant, in charge of Florida and Georgia plants.

Ky., Ashland—Ashland Sanitary Milk Co. has acquired property on 34th. St., and Winchester Ave., later will erect 2 story, brick creamery plant, cost \$50,000; equip with latest machinery; J. J. Schneider, Mgr.

Ky., Boyd—Old Orchard Building Corp., capital \$25,000, incorporated by H. O. Thornburg, C. H. Cottingham, J. S. Neal, all Huntington, W. Va.

Ky., Lexington—Tunis, Payne & Whitnack, capital \$100,200, incorporated by J. C. Tunis, A. H. Payne and others.

Ky., Maysville—Central Produce Co., incorporated by Alva West, Alfred M. Peed and others.

Ky., Paducah—Columbian Amusement Co., capital \$50,000, incorporated by Lee F. Keller, R. R. Kirkland, Rodney C. Davis.

Ky., Lexington—Au Grape Bottling Co. incorporated by C. C. Doty, L. R. Brooks, and others.

La., Monroe—H. H. Boyd Co., capital \$25,000, incorporated by H. H. Boyd, A. K. Kilpatrick and others.

La., New Orleans—Orleans Rice Milling Co., Inc., Leon H. Collet, Gen. Mgr., has acquired property on N. Peters St., will operate rice milling plant.

Md., Baltimore—Toilet Articles—Silica Gel Products Co., capital \$500,000, incorporated with C. Wilbur Miller, Pres., Garrett Bldg.; will manufacture toilet articles by means of the new silica gel process.

Md., Baltimore—Eden Terrace Water Co., 703 Caton Ave., capital \$25,000, incorporated by Victor G. Bloede, Wm. H. Thomas and others.

Md., Baltimore—Tobacco—Roig and Langsdorf, Inc., 607 Calvert Bldg., incorporated by Edwin Wile, Frederick C. Nelson and others.

Md., Baltimore—Wantmor Contracting & Hauling Co., Inc., 440 Lakewood Ave., capital \$10,000, incorporated by Harry Hanson, Joseph W. Starlings and others.

Md., Lonaconing—Capital Amusement Co., 68 Main St., incorporated by Arch M. Evans, Earl E. Reese and others.

Md., Waldorf—Southern Maryland Coca Cola Bottling Co., capital \$50,000, incorporated by Frederic B. Walter, Albert J. Phillips and others.

Miss., Biloxi—Erena L. Brady Hotel Co., capital \$50,000, incorporated by Erena L. Brady, W. L. Grice and others.

Miss., Gulfport—O'Neal Packing Co., capital \$50,000, incorporated by S. E. O'Neal, G. T. Darnall and others.

Miss., Jackson—Magnolia Ice Cream Co., incorporated by Walter M. Wright, J. L. Blackwell and others.

Miss., Mount Olive—Dixie Fishing Co., incorporated by J. B. Rawls, Jr., A. W. Evans and others.

Miss., Vicksburg—Vicksburg Seed Co., capital \$10,000, incorporated by J. F. Hald, E. O. Hair and others.

Mo., Cape Girardeau—Fire-Fighting Equipment—Details under Road and Street Construction.

Mo., Kansas City—Climax Construction Co., capital \$80,000, incorporated by E. E. Trowbridge, Geo. Harnes and others.

Mo., Kansas City—General Paving Construction Co., capital \$100,000, incorporated by J. L. Flannigan, M. W. Pickard and others.

Mo., Kansas City—Hunn-Letton Paint Co., capital \$50,000, incorporated by L. A. Starr, 4134 Forest Ave., W. B. Hunn, 4600 Warwick Blvd. and others.

Mo., Kansas City—Southwestern Stationery Co., incorporated by E. B. Gogwin, W. J. Dingman and others.

Mo., St. Louis—Excello Manufacturing Co., incorporated by J. J. Steiger, M. A. Willisdorf and others.

Mo., St. Louis—Viking Manufacturing Co., incorporated by O. C. Johnson, Edward Gilder and others.

Mo., St. Louis—National Bank Construction & Equipment Co., incorporated by Wm. S. Rex, J. A. Wise and others.

Mo., St. Louis—Arthur Lee Eastin Machine & Equipment Co., incorporated by A. L. Eastin, Charles Muskopf and others.

Mo., St. Louis—Electric Storage Battery Co., Phila., Pa. has acquired site on Vandeventer Ave. and will erect assembling plant; Klipstein & Rathman, Archts., St. Louis.

Mo., St. Louis—Construction Service Corp., capital \$20,000, incorporated by A. J. Elliott, K. B. Klemm and others.

N. C., Charlotte—Graselli Chemical Co., 23 W. Franklin St., will install mixing plant and laboratory in present plant.

N. C., Fayetteville—Cumberland Printing Co., Inc. (lately noted incorporated, capital \$25,000) organized with T. A. Lyon, Pres., Washington, D. C.; E. G. Burkhead, Sec.-Treas. and Mgr. Fayetteville; has acquired established plant; will operate.

N. C., High Point—Office Equipment Co., capital \$25,000, incorporated by J. A. Morris, A. H. Henley and others.

N. C., Jefferson—Allman Construction Co., incorporated by Lee A. and John Allman and others.

N. C., Rockingham—Rockingham Paper Co., capital \$75,000, incorporated by W. H. McCall, John L. Everett and others.

Okla., Cushing—White Manufacturing Co.'s ice cream plant; loss \$30,000.

Okla., Enid—Hackney Iron & Steel Co., will erect three buildings, 40x80-ft., 20x30-ft. and 40x85-ft., brick and concrete construction; cement floors; metal ceiling; metal doors; ventilators; steel sash and trim; wire glass; blds open.

Okla., Muskogee—P. H. Hayes and J. I. Lewis will establish 40,000 egg incubator on 4 acres site.

Okla., Spiro—Spiro Gravel Co., capital \$50,000, incorporated by E. B. Davis, W. W. Brown, Jr., M. I. Border, all Oklahoma City.

Okla., Walters—Walters Battery & Electric Co., incorporated by Hugh A. Carroll, Hugh Spratt.

S. C., Charleston—Unity Oyster Co., capital \$10,000, incorporated with Geo. C. Varn, Pres.-Sec. and Treas.

S. C., Greenville—Steele-Hedde Mfg. Co., is receiving bids through J. E. Serrine & Co., Engrs., Greenville, for reinforced concrete building, 2 stories and basement; plant will manufacture reeds, loom harness, drop wires, etc. (Previously noted.)

S. C., Kingstree—Electric Maid Bake Shop, incorporated with J. M. McGill, Pres.; S. B. McGill, Sec.-Treas.

S. C., Marion—Peoples Drug Co., capital \$10,000, incorporated with T. W. Hamilton, Pres.; S. P. Bolyn, Sec.

S. C., Spartanburg—R. E. Biber will install 4800-egg incubator at plant on National Highway.

Tenn., Knoxville—Galyon Printing Co., 503 Asylum Ave. acquired and will operate plant of Nu-Way Printing Co.

Tenn., Nashville—Nashville Paper Stock Co., D. L. Ledbetter, Mgr., Murfreesboro, Tenn., will rebuild burned plant; 4 stories; brick; cost approximately \$25,000.

Tex., Dallas—American Original Co., incorporated by J. S. Sullivan, E. D. Moore and others.

Tex., Dallas—Southern Theatrical Corp., capital \$100,000, incorporated by J. H. Yeargan, Jr., Lafayette Fitzhugh, R. T. Meador.

Tex., Dallas—Jolesch-Thomas Shoe Co., capital \$200,000, incorporated by I. Jolesch and others.

Tex., Dallas—Owena Ford Free Advertising Co., capital \$25,000, incorporated by L. A. Crews, E. F. White and others.

Tex., Dallas—Young-Dunkerley Co., capital \$10,000, incorporated by Floyd W. Dunkerley, Katherine H. Young and others.

Tex., Fort Worth—Fort Worth Blue Print Co., incorporated by R. J. Sherman, R. E. Jenkins and others.

Tex., Houston—Texas Packing Co. has plans by M. P. Burt, Archt., Memphis, Tenn., for 3-story brick and mill building on San Jacinto St.; office of company 110 Milan St.

Tex., Kerrville—Redwine Manufacturing Co., capital \$40,000, incorporated by R. F. Redwine, Charles Rawsam, and others; manufacturing nut handling machinery.

Tex., San Antonio—Richie Clothing Co., capital \$25,000, incorporated by David Bernard, Julius Mazur and others.

Tex., Waco—Hubby-Reese Co., capital \$50,000, incorporated by C. M. Hubby, W. L. Reese, Sr., and others.

Tex., Weslaco—Ault Bee Co., organized with Mr. Mieners, Local Mgr., will erect sheds, warehouses, etc., for the manufacture of apiary supplies.

Va., Bedford—Bedford Hardwood Co., capital \$50,000, incorporated with W. R. Dooley, Pres., Bedford; J. M. Stevens, Sec., Montvale.

Va., Green Spring—Creosoting—Chesapeake & Ohio Ry. Co., C. W. Johns, Chief Engr., Roanoke, Va., let contract to William Dwyer, Cincinnati, Ohio, to construct tie treating plant.

Va., Martinsville—Ford Overall Co., capital \$50,000, incorporated with H. A. Ford, Pres.; J. R. Walker, Sec.

Va., Norfolk—Banks Bros. Packing Co., capital \$500,000, incorporated with L. W. Banks, Pres.; M. Banks, Sec.

Va., Portsmouth—Cultivator—Downie Co., Inc., capital \$200,000, incorporated by C. E. Downie and G. D. Graverly has 2-story brick plant and will manufacture patented motorized cultivator and plow.

Motor Cars, Garages, Tires, Etc.

Ala., Selma—Finklea Motor Co., capital \$15,000, incorporated by J. Leo Finklea, W. J. Nettles and others.

Fla., Buena Vista, P. O. Miami—Garage, etc.—Freeman & Sons, Inc., H. J. Freeman, Pres., 3644 N. E. 2nd Ave. let contract to A. Middleman, Buena Vista, to erect 75x120-ft. two story addition, mill construction for ga-

rage and sales agency. (Lately noted incorporated, capital \$100,000.)

Fla., Jacksonville — McCants-Hall Co. let contract to Gerbrich & Gaugard, Jacksonville to remodel adjoining building on Julia St. (Lately noted.)

Fla., McIntosh—McIntosh Motor Co. has acquired site on Dixie Highway, will erect garage and showroom.

Fla., Miami—Freeman & Sons, Inc., capital \$100,000, chartered with H. J. Freeman, Pres.; R. D. Freeman, Sec.

Fla., Miami—Garage—The Watson Corp., 213 Congress Bldg., will erect fireproof garage building, cost \$120,000; work in progress; C. M. Watson, Const. Engr., Box 4202.

Ky., Louisville—Parkview Garage, increased capital from \$7000 to \$16,000.

Ky., Middlesboro — Evans-Ramie Motor Sales Co., capital \$50,000 incorporated by J. E. Evans, J. R. Ramie, F. F. Sharp.

Md., Baltimore—Crouch Auto Co., 1100 Cathedral St., capital \$50,000, incorporated by Harry M. Crouch, James W. Chatlam, Jr. and others.

Md., Baltimore—Filling Station—Aerogas Co., Inc., 2524 Maryland Ave., capital \$20,000, incorporated by Wm. H. Keihe, Everett D. Hood and others.

Miss., Clarksdale—Blain Motor Co., capital \$25,000, incorporated by J. O. Lamkin, J. D. Ballin and others.

Mo., Kansas City—Puncture Proof Tire Interliner Co., capital \$100,000, incorporated by J. D. Kusler, T. F. Shuler and others.

Mo., Kansas City—Laughlin-Shearer Motor Co., capital \$50,000, incorporated by F. Shearer, Jr., J. G. Laughlin and others.

Mo., St. Louis—Garage—Auto Laundry System Co., capital \$50,000, incorporated by Earl J. Kelso, 208 N. 8th St., M. D. Frumberg, 300 Rialto Bldg. and others.

Mo., St. Louis—B. J. Mullikin Tire Co., capital \$250,000, incorporated by B. J. Mullikin, A. P. Burgess and others.

Mo., St. Louis—Peerless Motor Co., incorporated with R. H. Collins, Pres.; F. A. Prester, Sec.

N. C., Aberdeen—Aberdeen Motor Car Co., capital \$50,000, incorporated by Geo. B. Martin, J. Talbot Johnson and others.

N. C., Charlotte—Belle Motor Sales Co., capital \$100,000, incorporated by Morris R. Guyer, Charlotte; J. M. Simmons, Elkin, N. C., and others.

N. C., Danbury—Garage, etc.—The Motor Co., of Winston-Salem, N. C., has acquired buildings on Depot St., will remodel for garage and show rooms for automobiles.

N. C., Greensboro—C. R. Sutton Auto Co., re-organized with C. R. Sutton, Pres.; R. E. Paschal, Sec.

N. C., Salisbury—Paul Rubber Co. will establish plant, one of the Paul system community tire factory, each plant being a complete unit; will manufacture tires.

N. C., Winston-Salem—Garage—The Motor Company, has acquired building on Depot St. will remodel for garage and show rooms.

Okla., Drumright—Drumright Chevrolet Co. (lately noted incorporated) organized with R. B. Farris, Pres.; E. E. O'Brien, Treas.; F. J. Thurman, Mgr.; will install repair tools, etc., for service station.

Tenn., Chattanooga—Filling Station—Wofford Oil Co., has under construction filling station corner Union and Cowart Sts., contemplates erecting one in downtown section, making fifth station in city.

Tex., Dallas—Mack International Truck Co., main office 25 Broadway, New York, let con-

tract to W. E. Easterwood to erect 2-story, 110x150-ft. brick building at Ervay and Hickory Sts.; cost \$60,000; C. E. Craddock, Southwestern Mgr.

Tex., Denton—Filling Station—Magnolia Petroleum Co. will erect \$6000 filling station on S. Sloum St.

Tex., Gunter—Oscar Gunter will erect \$8000 filling station.

Va., Radford—Radford Motor Co., Inc., (lately noted incorporated, capital \$50,000) organized with C. C. Cunningham, Pres.; F. N. Call, Treas.; J. F. Drugan, Sec.; let contract to W. H. Paniter, Radford, to erect 50x150-ft. fireproof building, cost \$20,000; have not decided as to equipment; Heith Wharton, Archt., Radford.

Va., Richmond—Motors Specialties Corp., capital \$25,000, incorporated with J. J. Alston, Pres., I. R. Meyers, Sec.

Va., Richmond—Garage—Richmond Rapid Transit Corp. has acquired building on Canal St., will remodel for garage.

Va., Richmond—Garage—Davis Bros., Inc., 2510 W. Main St., will erect 75x170-ft. garage building, brick and iron construction, slag roof, concrete floors, steel sash and trim, ventilators, metal doors; estimate cost \$30,000; to be occupied by the American Express Co. to house trucks.

Va., Roanoke—Engleby Motor Truck Co., capital \$15,000, incorporated with J. T. Engleby, Pres.; F. A. Engleby, Sec.

Va., Winchester—Henson Motor Co., capital \$50,000, incorporated with P. T. Henson, Pres.; R. C. Wright, Sec.

W. Va., Huntington—Garage—G. Towns Davis will erect brick garage buildings at 1009 Sixth Ave.; estimated cost \$10,000.

Railways

Tex., Snyder—E. J. Anderson, secretary Rotan Westward Extension committee, has, it is reported, applied to the Interstate Commerce Commission for authority to build a railroad from Rotan, Tex., to Snyder about 28 mi. Others of the committee are O. P. Thrane, of Snyder; C. W. Meadows, Waco; R. Q. Lee, Cisco; G. B. King, Albany; D. Dorward, Gail; J. R. Lowrie, Lamesa; N. A. Stansell, Lovington, (N. M.); J. M. Easley, Seminole; A. P. Schmidt, Delson; J. J. Pettus, Moran; H. O. Cassel, Hamlin; J. D. Cohen, Rotan; Louis Keel, Roswell, (N. M.); C. E. Doak, O'Donnell; and W. C. Coope, Stamford, Tex.

Road and Street Construction

Alabama—State Highway Dept., Montgomery, Ala., plans building 2 roads as follows:

8.96 mi. gravel surfaced Uniontown-Brown's Station road, Perry County; 27 mi. gravel surfaced road between Akron and Newbern, Hale County; W. S. Keller, State Highway Engr., Montgomery.

Ala., Birmingham—City plans expending \$70,000 for street paving in residential section. Address The Mayor.

Ala., Birmingham—Highland Park Land Co. let contract to Dunn Construction Co., Birmingham, at \$25,000, to pave streets in Central Park Highlands, newly developed residential section.

Ala., Russellville—State Highway Comm., Montgomery, Ala., and State Highway Comm., Jackson, Miss., plan building 10 mi. gravel road near Vina, Ala., 7 mi. to be in Alabama and 3 mi. in Mississippi; connect Memphis and tri-cities of North Alabama with road via Tupelo; D. W. Robins, Highway Commr., Tupelo, Miss.

Ala., Russellville—Franklin County, Red

Bay Dist., plans building 23 mi. gravel road from Red Bay to Fulton, Miss., to connect with Bankhead Highway. Address County Commrs.

Ala., Sheffield—State Highway Dept., Montgomery, Ala., let contract to Southern Roads Co., at \$12,500, to complete link connecting Florence, Sheffield and Tusculma.

Ark., Blytheville—Board of Commrs. or Improvement Dist. Nos. 2 and 3, let contract to J. H. Rouse Construction Co., Cape Girardeau, Mo., at \$450,000, for paving and storm sewers as follows; 109,813 sq. yds. paving; 24,637 lin. ft. storm sewers; E. T. Archer & Co., Engrs., New England Bldg., Kansas City, Mo. (Lately noted.)

Ark., Forrest City—St. Francis County, Commrs. of Road Improvement Dist. No. 12, will receive bids until Sept. 17 to improve certain roads in district; plans, etc., from Dr. Luther Davis, Sec., Democrat, Ark., A. W. Buford, Dist. Engr., Forrest City, or State Highway Comm., Little Rock.

Ark., Pine Bluff—Plum Bayou Road Dist., Jefferson County, let contract to Bradley, Carr & Gwin, Sheridan, Ark., at \$126,766.50 for 20.6 mi. gravel road from Sherrill to Fernday, through Tucker; and between these points branching to Core and Wright places at river and Lonoke County line; also for 100-ft. bridge over Plum Bayou, and three 40-ft. bridges over Waterloo Canal. Address County Commrs.

Ark., Van Buren—City plans paving following streets in Improvement Dist. No. 5: 11th, at E. Main to intersection of Poplar; 12th and Moore, from E. Main to north of Baldwin, 13th from E. Main to Dechard, 14th from E. Main to Poplar, Olive from Poplar to Dechard, Cherry and Cedar, from 11th to 15th, Elm from 11th to 13th, Poplar from 13th east to Frisco R. R. crossing at 15th, Baldwin from 12th to Oliver, Dechard and Byron Sts. Address The Mayor.

Ark., Walnut Ridge—Lawrence County, Commrs. of Road Dist. No. 1, let contract to Albright Construction Co., for road improvement in Dist.

D. C., Washington—Dist. Commrs. let contract to Wm. F. Cush, Inc., to grade Atlantic St. and Livingston road, southeast, and for approaches to bridges over Oxon Run.

Fla., Brooksville—State Road Dept., Tallahassee, Fla., let contract to Broadbent & Groetting, Ocala, Fla., at \$287,790.98 for 9.5 mi. road from Brooksville to Pasco County line. Project No. 545; sheet asphalt with binder course on 8-in. rock base.

Fla., DeLeon Springs—Details under Land Developments.

Fla., Fort Pierce—State Road Dept., Tallahassee, let contract to C. F. Lytle, Jacksonville, Fla., at \$252,357.58, for 7.12 mi. road from Wabasso to Sebastian River, St. Lucie County, Proj. No. 36B; rock base, bituminous macadam, or plain concrete. (See Machinery Wanted—Road Oiling Equipment.)

Fla., Jacksonville—Details under Water Works.

Fla., Key West—Monroe County Commrs, plan building 125 mi. overseas highway from Key West to mainland; approximate cost \$1,500,000; contemplates voting in Sept. on bonds.

Fla., Leesburg—Board of Commrs. will receive bids until Sept. 24 for 60,000 sq. yds. street paving, with necessary drainage, curb and gutter; plans, etc., from D. E. Bivens, City Mgr.; H. S. Jaudon Engineering Co., Elberton, Ga.

Fla., Ocala—Details under Land Developments.

Fla., Pahokee—Details under Water Works.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Fla., Pensacola—Escambia County Commrs. let contract to Lawrence Construction Co., Augustus, Ga., at \$209,434.58 for 7 mi. paving on Pensacola-Flomaton highway, south of Flomaton.

Fla., Sebring—Highlands County, Avon Park Township, plans building 10 sections of roads as follows:

No. 1, 2 1/4 mi. road from Lake Lotela north to Arbuckle road and thence to county asphalt road; No. 2, 1 mi. east from Arbuckle road; No. 3, 1/2 mi. east from center of Sec. 23, connecting with No. 1; No. 4, 1 mi. from Deer Lake to Lake Viola, to Central Ave., and on Central Ave. to Lake Byrd; No. 5, 5 1/2 mi. from State Road No. 8, north of Lake Byrd, to Lake Olivia, to County line, branching east to State road and west to Hardee County; No. 6, 2 1/2 mi. from State Road No. 8, at north-west shore of Lake Damon, along Damon and Pythias lakes, joining Avon Park-Frostproof road; No. 7, 1 1/4 mi. Lake Isabel to township line; No. 8, 1 mi. east on Arbuckle road from Road No. 1; No. 9, 3 1/4 mi. Shockley road, from Frostproof road west, between Pioneer and Pythias; No. 10, from Road No. 4 to present asphalt county road, and on to Shockley road by Lake Pioneer; contemplates \$50,000 bond issue. Address County Commrs.

Fla., Tavares—Details under Land Developments.

Fla., West Palm Beach—Palm Beach County Commrs. will receive bids until Sept. 15 to build and complete 6 hard surfaced roads as follows:

8.045 mi. on Roads Nos. 1, 2 and 3; 2.038 mi. on Road No. 4, known as Kerns Road; 2.04 mi. on Road No. 5, known as Mapp Road; all in Special Road and Bridge Dist.. No. 16; 1.129 mi. road, from Broward County line to bridge across Boca Raton Inlet; plans, etc., from Chas. H. Holstlaw, County Engr.; R. L. McCarley, Chmn., Commrs.

Ga., Cleveland—Nacoochee-Hiawassee Scenic Highway Assn., interested in building highway through Unicol Gap. Address W. R. Neel, State Highway Engr., Atlanta, Ga.

Ga., Forsyth—Monroe County plans improving national highway between Forsyth and Barnesville. Address County Commrs.

Ga., Waycross—Ware County Bond Comm. let contract to Sam E. Findlay, Atlanta, to lay 18-ft. wide asphalt wearing surface on first 7 mi. of Dixie Highway.

Kentucky—State Highway Dept., Frankfort, Ky., plans 3 roads as follows:

9.498 mi. Richmond-Mt. Vernon road, Eastern Dixie Highway, from Berea to Round Stone, Madison & Rockcastle Counties, State Proj. No. 5, Sec. B. and D., Federal Aid Project No. 88, Sec. A. and B.; 12.60 mi. Winchester-Stanton road, from east corporate limits of Winchester to Powell County line, State Project No. 4, Sec. A.; all water-bound macadam, macadam surface treated, or bituminous macadam; Joe S. Boggs, State Highway Engr.

Ky., Frankfort—City plans reconstructing E. Main St. from St. Clair, St. Clair to Bridge and from Bridge to city limits; State Road Dept. co-operating. Address The Mayor.

Ky., Mount Sterling—State Highway Comm., Frankfort, Ky., will receive bids until Sept. 26 to improve 6.502 mi. Mount Sterling-Owingsville road, from east corporate limits of Mount Sterling to 750 ft. beyond Bath County line; State Project No. 47, Sec. B., Federal Aid Project No. 98; rock asphalt on napped limestone or concrete base, or reinforced concrete; plans, etc., from Joe S. Boggs, State Highway Engr., Frankfort, Ky.

La., LaFayette—Louisiana Highway Comm., Raymond Bldg., Baton Rouge, La., will receive bids until Sept. 25 for 6.111 mi. La Fayette-Broussard road, La Fayette Parish, Federal Aid Project No. 136-A; sand clay gravel; plans, etc. on file; J. M. Fourmy, State Highway Engr.

La., Mandeville—Details under Miscellaneous Construction.

La., New Roads—Louisiana Highway Comm., Raymond Bldg., Baton Rouge, La., will receive bids until Sept. 25 to grade, drain, 15.03 mi. New Roads—Simmesport-Torras Highway, 7th Road Dist.; Pointe Coupee Parish, State Project No. 09; plans etc. on file; J. M. Fourmy, State Highway Engr.

Md., Baltimore—City will receive bids until Sept. 19 to grade and pave with cement concrete footways in Cont. No. 73; plans, etc., from Board of Awards, Mayor Howard W. Jackson, Pres.; Stuart Purcell, Ch. Engr.

Md., Baltimore—Paving Comm., 213 E. Lexington St., plans laying sheet asphalt on following streets:

Rayner Ave. from Poplar Grove to Ashburton, Lanvale from Dukeland to Ashburton, and Dukeland from Rayner Ave. to Lanvale St.; also Curtain Ave. from Aiken St. to Harford Ave., and Aiken St. from Curtain to Belmont Aves.; plans paving following streets on 50-50 plan with development companies: Dorchester road, from Cedardale road to Callaway Place, Copley road from end of present pavement to Ashburton St., and from Ashburton St. to 20-ft. alley, Grantley road from Ashburton to 20-ft. alley; Northwest Real Estate Co., Morris Bldg., paying half; Juneau Place from Hancourt road to Eutaw Heights Ave., and Canterbury Lane from Tyndale Ave. to Eutaw Heights Ave., Blankner Realty Co., Title Annex Bldg., to pay half;

Approved contracts for sheet asphalt paving on following streets: To American Paving & Contracting Co., Montebello, at \$64,366.90, Whittemore, Pine Heights Ave., Mallow Hill road and Woodbine Ave.; to Daniel Marine & Co., 24 S. Front St., at \$56,737.50, for cement concrete paving on Cornhill, Brookwood roads, Oakland, Quick, Arabia, Beverly Ave., Hunting Place and Winans Way; R. Keith Compton, Chmn.

Md., Cockeysville—Cockeysville Improvement Assn., interested in paving side walks.

Md., Westminster—State Roads Comm., 601 Garrett Bldg., Baltimore, Md., receives bids until Sept. 11 for 1 mi. concrete road from New Windsor toward Englar's Mill, via Buffalo Road; John N. Mackall, Chmn.

Miss., Aberdeen—Monroe County will receive bids until Sept. 26 for 20 mi. 18-ft. concrete road, from Nettleton, on Southern Lee County and northern Monroe County lines, to Aberdeen; cost \$600,000; Federal government and Monroe County, each to pay \$300,000. Address County Commrs.

Miss., Greenwood—City let contract to E. A. Finch, Hattiesburg, at \$200,000 to repave certain streets and avenues, totaling 44,382 sq. yds.

Miss., Jackson—Details under Bridges, Culverts, Viaducts.

Mo., Boonville—City let contract to Charles Stretz & Sons, Boonville, at \$1.75 sq. yd. to pave Spring and 1st Sts., to Sante Fe Trail.

Mo., Cape Girardeau—City Comm. plans expending \$10,000 to pave Alley between Good Hope and William, and Spring and Ellis Sts.; to grade and gravel Dunkin Ave., between North Blvd., and Perry Ave.; to improve and lay sidewalks on Painter Ave.;

also to install fire plugs on Park Ave. between Broadway and Normal Ave., and 6 fire plugs between Henderson and Perry Aves., and Dunklin and New Madrid Sts. on Blvd.

Mo., Carthage—City will receive bids soon to pave Lyon St. Address The Mayor.

Mo., Caruthersville—Pemiscott County, Bragg City Special Road Dist., plans building road to connect Bragg City with Caruthersville-Kennett highway; also to connect with Pascola road, and to improve certain other roads; voted \$50,000 bonds. Address County Commrs.

Mo., Columbia—City let contract to Clyde A. Stewart, Columbia, at \$20,000, for paving S. Garth and Turner Aves.

Mo., Excelsior Springs—City let contract to Contr. Smiley, for 10 ft. additional pavement, including gutter and curbing, from city limits to Dunbar Ave.; E. E. Parsons, City Mgr.

Mo., Farmington—State Highway Comm. Jefferson City, Mo., let contract to Smith & Creek, St. Louis, Mo., at \$18,000 for 1.1 mi. concrete road between Elvins and Bismark.

Mo., Jackson—Cape Girardeau County plans improving upper and lower Egypt Mills roads. Address County Commrs.

Mo., Moberly—City let contract to W. L. Barr, at \$4.19 sq. yd. to pave with brick, N. Morley St., 70 cents for curbing and 50 cents for grading; will receive bids to pave Concannon St. Address The Mayor.

Mo., St. Louis—Details under Land Developments.

Mo., Springfield—War Dept., Washington, D. C., appropriated \$12,000 to improve National Blvd., from National Cemetery to city limits; John McCarthy, Sexton at Cemetery.

Mo., Tarkio—Town let contract to Cook-O'Brien Construction Co., Kansas City, Mo., for 2 blocks of paving.

North Carolina—State Highway Comm., Raleigh, N. C., let contracts for 10 road projects as follows: 180—Perquimans County, 9.96 mi. hard surface road from Hertford to Pasquotank County line. Route No. 342, to Smith Bros., Dallas, Tex., at \$224,691.10 for roadway and structures; 185—C. Pitt County, 14.35 mi. hard surface road from Greenville to Beaufort County line, Route No. 9, to Groves Co. & Shepard, Duluth, Minn., at \$421,638.50; 421—Franklin County, 8.23 mi. soil road from Franklinton to Wake County line, Route No. 50, to J. A. Marrow, Clarksville, Va., at \$55,465.80 for roadway and structures.

495—Warren County, 7.91 mi. soil road from Norlina to Virginia State line, Route No. 50, to J. A. Marrow, Clarksville Va., at \$48,444.50 for roadway and structures; 507—Alamance County, 4.03 mi. hard surface road from Graham toward Belmont, Route No. 62, to Ziegler-Dalton Construction Co., Junction City, Kansas, at \$110,878.80; 592—Rockingham County, 8.22 mi. hard surface road from Reidsville to Guilford County line, Route No. 70, to Ziegler-Dalton Construction Co., at \$252,892.80 for roadway, and to J. L. Brinkley, Thomasville, N. C. at \$29,017.80 for structures.

611-697—Anson-Union Counties, 15.4 mi. hard surface road from Polkton to Marshville, Route No. 20, to Jas. O. Heyworth, Chicago, Ill., at \$455,229.60; 679—Scotland County, structures between Laurinburg and Richmond County line, Route No. 20, to J. T. Gwathmey, Norfolk, Va., at \$18,411.60; 902—Buncombe County, 4.95 mi. hard surface road from Candler to Haywood County line, Route No. 10, to Wilson Construction Co., Rutherfordton, N. C., at \$193,957, for roadway, and to R. C.

Stevens, Asheville, at \$18,357 for structures; rejected bids for Project No. 745, Forsyth County.

N. C., Bryson City—Swain County, Nantahala Township plans grading road from Valley River Gap, at Cherokee County line, through township; will vote Sept. 15 on \$20,000 bonds. Address County Commrs.

N. C., Charlotte—Mecklenburg County Highway Comm., let contract to Noll Construction Co., Box 588, Lexington, N. C., at \$240,000 to hard surface 8 mi. Lawyer's road, between Alexander's Store and Cabarrus County line; concrete sub-structure, asphalt surface.

N. C., Gastonia—Gaston County Commrs. plan building 6 roads as follows: Hard surfaced road from McAdenville to Piedmont & Northern Ry. line at Ray Station; road from Stanley-Belmont highway near Goshen Church to Mt. Holly; hard surfaced road from highway at Lowell to Art Cloth Mills, Inc.; contemplates building road from point on Linwood Highway to South Carolina line, via Sparrow Springs; from Bess' store on Landers' Chapel road to Cherryville, and completing stretch from end of Linwood road into Kings Mountain.

N. C., Gastonia—City will grade and improve streets, sidewalks, curbs and gutters; plans \$250,000 bond issue; B. H. Parker, Mayor.

N. C., Mt. Gilead—Board of Commrs. will receive bids until Sept. 20 to improve certain streets; 17,500 sq. yds. pavement; 10,000 lin. ft. curb and gutter; 3000 sq. yds. concrete sidewalks; also necessary grading appurtenances and storm sewers; plans, etc. L. V. Edwards, Consult. Engr., Winston-Salem, N. C.; R. E. Hamlet, Mayor.

N. C., Salisbury—Details Under Water Works.

N. C., Statesville—State Highway Comm., Raleigh, N. C., will receive bids until Sept. 17 for 8.04 mi. hard surface road from Statesville to Turnersburg, Route No. 26, Iredell County, Project No. 641. (Lately noted, bids until Aug. 29.)

Okla., Dunbar—State Highway Comm., Oklahoma City, will receive bids until Sept. 19 for 3 sections of road in Stephens County embracing 26 mi. in projects Nos. 99, 101 and 102; concrete base with asphalt top; Bates-section concrete; 7-in. slab concrete; probably concrete base with brick top; approximate cost \$900,000; Paul Nesbitt, State Highway Commr.; Fred Simmons, State Highway Engr.

Okla., Sapulpa—Creek County Commrs. will receive bids soon for 34 mi. hard surfaced roads in Tiger Township, on Albert Pike highway; State road between Oilton and Drumright, and on south and southwest side of Drumright to Payne County line. Tiger Township voted \$300,000 bonds; Federal Aid to furnish \$300,000.

Okla., Weleetka—City let contract to Wilson & Bush, Weleetka, Okla., at \$22,645.20, for 4 blocks of brick pavement on Seminole Ave.; also plans paving 5 more blocks. Address The Mayor.

S. C., Aiken—Aiken County let contract to Thos. E. Hook, New Brookland, S. C., at \$22,770.27 for 8 mi. State Route No. 39, from Oak Grove Church to Monetta.

S. C., Hampton—Hampton County will receive bids until Sept. 18 for 4.227 mi. State Highway No. 1, between Hampton and Varnville; W. C. Cathey, Div. Engr., Greenville Bldg., Orangeburg, S. C. (Lately noted bids until Aug. 22.)

S. C., Spartanburg—Details under Sewer Construction.

S. C., York—York County plans paving 3 roads as follows:

East and West road from Smyrna on Cherokee County line to Lancaster County line; North and South road, from North Carolina line near Bowling Green to Chester County line, near Lowryville; between North Carolina line near Pineville and Chester County line near Smith's turnout; will vote Oct. 23 on \$2,000,000 bonds. Address County Commrs. (Lately noted to vote Sept. 18.)

Tennessee—State Highway Dept., Nashville, Tenn., will receive bids until latter part of Sept. for 3 road projects as follows:

State Aid Project No. 133, Jefferson County, 3.3 mi. bituminous penetration surface on Morristown and Knoxville road; State Aid Project No. 132, Knox County, 13 mi. bituminous macadam, between Knoxville and Straw Plains; Federal Aid Projects Nos. 23 and 24, Marion County, 5 mi. bituminous penetration macadam, between Hamilton County line and Suck Creek; J. G. Creveling, State Highway Commr.

Tennessee—State Dept. of Highways and Public Works, Nashville, Tenn., plans building 3 highways as follows: Haywood County, 14 mi. from Brownsville to Tipton; Tipton County, 5 mi. from Haywood County line to Fayette County line; Knox County, 10 mi. from Knoxville to Jefferson County; J. G. Creveling, Commr.

Tenn., Athens—City plans expending approximately \$110,000 to pave following streets:

East and West Main, Roberson, Green, S. White, Henderson, Summit, Ohio from Summit to corporate limits, Madison Ave. from Houston to Blount. Address The Mayor.

Tenn., Athens—City let contract to Callo-way & Co., Lenoir City, Tenn., at \$95,000 for additional street improvements.

Tenn., Benton—Polk County plans expending \$26,000 to improve highways. Address County Commrs.

Tenn., Bristol—City plans rebuilding Spruce St. to golf links. Address The Mayor.

Tenn., Chattanooga—City and Tennessee Electric Power Co., E. D. Reed, Supt., plan paving following streets: Chestnut from W. 9th to Main, 13th from Market to Carter, concrete; Rossville Ave. extension, from Main to Terminal Station, then to Market St., concrete; 9th from Market to Chestnut; Dodds Ave. to McCallie, etc. Address Commr. Bass.

Tenn., Knoxville—Details under Land Developments.

Tenn., Knoxville—Knox County let contract conditionally to J. M. Burkhart, at \$52,025 for 3 mi. Huffaker Ferry road; water-bound macadam. Address County Commrs.

Tenn., Rockwood—City let contract to West Construction Co., Chattanooga, at \$124,981 to pave Rockwood Ave. from Kingston Ave. to Spring St., and Kingston Ave., 3 blocks south and 5 blocks west from Rockwood Ave.; asphaltic concrete base; Chas. Barnett, supervising construction; plans installing white way on several blocks in business district.

Tenn., Rutledge—Grainger County let contract to R. L. Peters, Knoxville, at \$65,000 to build road from Powder Springs to Joppa, across Clinch Mountain, connecting Richland and Flat Creek valleys.

Tex., Abilene—Taylor County plans road building; contemplates \$350,000 bond issue. Address County Commrs.

Tex., Amarillo—Potter County will receive bids about Nov. 1 to grade, construct drainage structures and gravel 12 mi. road in

County; approximate cost \$137,000; Sam B. Motlow, County Judge; Maj. Oscar A. Seward, County Engr.

Tex., Athens—Henderson County, Road Dist. No. 10, plans road building; will vote Sept. 22 on \$40,000 bonds. Address County Commrs.

Tex., Austin—Travis County plans improving 5.57 mi. State Highway No. 2, Round Rock Road Section, Federal Aid Project No. 409; estimated cost \$26,460; federal aid 50%; O. Leonard, County Engr.; Geo. S. Matthews, County Judge.

Tex., Bonham—Fannin County let contract to Julian C. Field & Co., Denison, Tex., at \$243,532.20, for 7.35 mi. 18-ft. concrete road on State Highway No. 5, Federal Aid Project No. 344.

Tex., Brady—McCulloch County, plans 5 mi. State Highway No. 9-A, east from Concho County line; E. A. Burrows, County Engr.; E. J. Adkins, County Judge.

Tex., Brenham—Washington County let contract to L. F. McMillan, Austin, for grading and surfacing, and to Austin Bros. Bridge Co., Coombs St., Dallas, for drainage structures, on 17.3 mi. State Highway No. 36, Federal Aid Project No. 358.

Tex., Cameron—City plans paving business district with 1-in. surface Uvalde rock asphalt. Address The Mayor.

Tex., Canton—Van Zandt County plans 9 mi. 9-ft. concrete pavement on State Highway No. 15, from Grand Saline west; estimated cost \$120,000; State Highway Comm. Austin, granted \$60,000 federal and \$20,000 state aid; C. L. Hubbard, County Judge.

Tex., Carthage—Panola County will build 11 mi. State Highway No. 15-A, in Clayton Dist.; State Highway Comm., Austin, granted \$55,000 aid; also plans 5.6 mi. State Highway No. 8, Road Dist. No. 4, from Murvall Creek to Brushy Creek, via Gary; estimated cost \$86,500; Titus & Dillon, Engrs., Center Tex.

Tex., Cleburne—Johnson County plans improving 4.84 mi. State Highway No. 10-A, east from Cleburn to Turkey Creek; R. E. Keller, County Engr.; O. B. McPherson, County Judge.

Tex., Coleman—Coleman County plans building 4 mi. State Highway No. 7-A, south from Coleman; W. E. Dickerson, County Engr.; S. J. Pierratt, County Judge.

Tex., Corpus Christi—Nueces County plans 16-ft. bituminous macadam road on State Highway No. 12-A, west from Robstown; estimated cost \$90,000; Calvin E. Cock, County Engr.; H. R. Sutherland, County Judge.

Tex., Dalhart—City plans paving 12 blocks, including Main St., and Rock Island and Denver Aves. Address The Mayor.

Tex., Dallas—Details under Land Developments.

Tex., Dallas—Dallas County plans high type pavement on 11.87 mi. State Highway No. 6, south from Collin County line; State Highway Comm., Austin, granted \$150,000 aid; Arch C. Allen, County Judge; Nagle-Witt-Rollins Engineering Co., Dist. Engrs., Courthouse, Dallas.

Tex., Decatur—Wise County plans laying 12-ft. gravel surfacing on State Highway No. 2; State Highway Comm., Austin, granted \$33,000 aid; Address S. M. Ward, County Judge. Decatur.

Tex., Eastland—Eastland County let contracts to Chapin-Kemp Co., 910 Austin St., San Antonio, for 2 sections of roads as follows:

18.69 mi. bituminous macadam pavement on State Highway No. 18, from Eastland to Gorman at \$94,821.27; 10.04 mi. bituminous macadam pavement on State Highway No.

22, from Eastland north to County line, at \$61,883.08; C. S. Henning, Jr., Engr. in charge, Eastland.

Tex., El Paso—City plans paving Trowbridge St., blocks 90 and 74 of Government Hill addition; W. C. Stewart, City Engr.

Tex., El Paso—El Paso County, plans resurfacing Montana St. from city limits to Loretto College; also repair crossroads west of college between Montana and Trowbridge; academy plans circular drive in front of buildings, from Montana St. to crossroads.

Tex., Floresville—Wilson County plans building State Highway No. 9, in Floresville Dist.; State Highway Comm., Austin, granted \$150,000 federal aid, and \$50,000 state aid; L. W. Scheide Mantel, County Engr.; J. E. Canfield, County Judge.

Tex., Fort Worth—City Comm., City Sec. Snow, will receive bids soon to pave following streets:

Tyler, from New York Ave. to Stone St.; Helen, from Jefferson to Forest; Rogers, from Gibson Ave. to West View St.; Jerome St. from Rosedale St. to Park Place; 6th Ave. from Camp Bowie Blvd. to 12th St.; Wilkinson, from Fort Worth-Dallas Pike to Toronto St.; let contract to West Texas Construction Co., 504 Cotton Exchange Bldg., Fort Worth, to pave Greene St. from Forest Park Blvd. to Gibson Ave.

Tex., Gainesville—Cook County contemplates 7 mi. State Highway No. 40, between Gainesville and Red River; G. W. Dayton, County Judge.

Tex., Galveston—City Comm. will open bids soon to pave with asphalt, 39 blocks on 14th and 35th Sts.; estimated cost \$90,000.

Tex., Greenville—Hunt County plans completing State Highway No. 39 west from Greenville; State Highway Comm., Austin, granted 25 per cent State Aid; J. D. Metcalfe, Engr.-in-Charge; Olin P. McWhirter, County Judge.

Tex., Hillsboro—Hill County will receive bids until Sept. 28, for 2 gravel roads as follows: 5.65 mi. State Highway No. 2-E, Itasca Dist.; 4.85 mi. State Highway No. 2-E, Covington Dist.; Federal Aid Project No. 413-B; Guy R. Johnston, Engr.-in-Charge; W. L. Wray, County Judge.

Tex., Houston—E. H. Fleming & Co., let contract to Scott Shambaugh, Houston, at \$45,785 to pave Sunset Blvd., from Main to Ashby.

Tex., Houston—City let contract to Gulf Bitulithic Co., 701 Foster Bldg., Houston, at \$152,941.50 to pave Polk Ave. from Hutchins to Dumble Sts.; 2-in. Warrenite bitulithic on 6-in. concrete base; also granted permission to Henke & Pillot to lay driveways from Main St. through property to Milam St.

Tex., Johnson City—Blanco County let contract to H. J. Evans, 500 W. 15th St., Austin, Tex., at \$53,357.55, for 7.19 mi. Austin-Fredericksburg Highway, west from Hays County line; also let contract to Ruby & Co., Blanco City, Tex., at \$22,570.54, to grade, gravel and construct drainage structures on 5.53 mi. Austin-Fredericksburg Highway.

Tex., La Grange—Fayette County Commrs. Court plans road building in Road Dist. No. 7; will vote on \$10,000 bonds.

Tex., Laredo—Webb County plans building roads; voted \$250,000 bonds. Address County Commrs.

Tex., Lubbock—Details under Sewer Construction.

Tex., Marshall—Details under Water Works.

Tex., Mason—Mason County plans 14.25 mi. State Highway No. 9, between Mason and McCulloch County line; \$21,000 federal aid asked; J. T. Banks, County Judge.

Tex., Mount Pleasant—Titus County will receive bids until Sept. 21 to improve and construct drainage structures on 2 roads as follows: 2 mi. gravel road on Highway No. 35; 4 mi. gravel road on Highway No. 1-A; plans, etc., from Dan M. Cook, County Judge, Mount Pleasant, and State Highway Dept., Austin.

Tex., Orange—Frank P. McElwath, Corsicand, Tex., was awarded contract to pave 2½-mi. oil field road from Winfree school house to Cow Bayou Bridge, on lower Orange and Beaumont road.

Tex., Paris—U. S. Dist. Engr., Fort Worth, Tex., approved plans for 1.99 mi. concrete pavement on State Highway No. 5, Lamar County; estimated cost \$63,600; will receive bids soon; W. M. Fooshee, County Engr.; W. Dewey Lawrence, County Judge.

Tex., Paris—Lamar County let contract to Julian C. Field & Co., Denison, Tex., at \$66,591, for 2.58 mi. concrete road on State Highway No. 5, through Brookston.

Tex., Pittsburg—Camp County Commrs Court let contract to Womack Construction Co., Sherman, Tex., at \$147,000, to rebuild 6 mi. Jefferson Highway from Pittsburg south to Upshur County line; 10-in. native asphalt rock base, asphalt surface.

Tex., Richmond—Ch. Engr., U. S. Bureau of Public Roads, Washington, D. C., approved plans for 15.14 mi. 18-ft. reinforced concrete pavement on State Highway No. 3, Fort Bend County, Federal Aid Project No. 326; estimated cost \$607,709.41; federal aid \$230,000; C. H. Kendall, County Engr., Sugarland, Tex.; C. D. Myers, County Judge, Richmond.

Tex., San Antonio—Bexar County plans building 8.8 mi. Castroville road; State Highway Comm., Austin, granted \$99,331.32 aid; A. C. Pancoast, County Engr.; Augustus McCloskey, County Judge.

Tex., Sulphur Springs—Hopkins County plans building State Highway No. 1, from Sulphur Springs to Hunt County line, via Brashear and Bumby; voted \$160,000 bonds; R. E. Bertram, County Judge.

Tex., Temple—Bell County contemplates 8 mi. 20-ft. highway, connecting Belton and Temple; concrete base; bituminous topping; estimated cost \$400,000; J. W. Sutton, County Judge; financed by County and local funds, State and Federal aid.

Tex., Tyler—Smith County plans 3 mi. concrete pavement on State Highway No. 15-A; estimated cost \$100,000; State Highway Comm., Austin; granted \$66,666.66; D. K. Caldwell, County Engr.; D. R. Pendleton, County Judge.

Tex., Tyler—Smith County plans grading and constructing bridges on 7 mi. State Highway No. 15-A; estimated cost \$21,000; State Highway Comm., Austin, granted \$10,500 State Aid; also to lay additional bituminous topping on State Highway No. 15. Longview road; State Highway Comm. Austin, granted \$22,833.34 State Aid; D. K. Caldwell, County Engr.; D. R. Pendleton, County Judge.

Tex., Vernon—Wilbarger County let contract to B. O. Gilstrap, Iowa Falls, Tex., at \$15,837.60, for 6007.5 sq. yds. reinforced concrete pavement on .64 mi. in County, Project No. 2; John B. Nabors, County Engr.

Tex., Waco—City plans opening 7th St. from Washington to Austin Sts. Address City Engr. Koch.

Virginia—State Highway Dept., Richmond, Va., let contracts for 3 road projects as follows: 276-A, Louisa and Albemarle Counties, 9 mi. road from point 2 mi. west of Trevilians, Louisa County, to point 1 mi. west of Cobham, Albemarle County, to Ellis-Brooke Co., Staunton, Va., at \$324,397; S-328 Route

39, Elizabeth City County, 1.8 mi. from Phoebus to Buckroe Beach, to Cannaway Hudgins Co., Hampton, Va., at \$46,367.45; H. G. Shirley, State Highway Commr.

Va., Alexandria—City plans 45 squares street improvement, including Duke, Wilkes, Columbus, Oronoca, West, etc.; all gravel. Address The Mayor.

Va., Cape Charles—Town plans street improvements; voted \$50,000 bonds. Address Mayor Dize. (Lately noted.)

Va., New Kent—State Highway Comm., Richmond, Va., contemplates building road between New Kent Courthouse and West Point.

Va., Portsmouth—State Highway Comm., Richmond, Va., is reported to build 15 mi. Dismal Swamp road, from Deep Creek, Norfolk County, to North Carolina line, connecting with South Mills, N. C. link of North Carolina State Highway system; gravel; will invite bids soon; H. G. Shirley, Comm. of Comm.

Va., Princess Anne—Princess Anne County let contracts for 6 gravel road projects as follows: 5 mi. Great Neck road, between District line and London Bridge Station, to C. R. Sanderson & Son, Cumberland, Va., at \$55,000; three following roads to R. B. Denby, Norfolk, Va.—1.5 mi. Great Neck road, from London Bridge to Seaboard line, at \$15,000; 2.10 mi. Mapleton road, from Lynnhaven Station to Seaboard line, at \$25,000; 1.50 mi. Oceana road from Oceana Station to Seaboard line, at \$16,000; two following to C. R. Sanderson & Son:—3.50 mi. Mill Dam road, from Oceana to London Bridge, at \$40,000; 3.75 mi. Little Neck road, from State road No. 10 to W. C. Hill's place, at \$40,000.

Va., Richmond—City plans expending \$23,000 to grade streets in Patterson Tract, west of Belt Line. Address The Mayor.

W. Va., Beckley—Raleigh County Court plans improving 7 roads in Slab Fork Dist.; will vote Oct. 13 on \$390,000 bonds. Address County Commrs.

W. Va., Charleston—Details under Land Developments.

W. Va., Charleston—Kanawha County, Union Dist., plans completing road from Dunbar to Nitro; contemplates \$150,000 bond issue; County Court will pave 2 mi.; Union Dist. to pave 4 mi. Address County Commrs.

W. Va., Huntington—City will receive bids until Sept. 24 to grade, pave and curb following streets and avenues: Hughes St. from Pole Creek to one block west of Vinson; 7th Ave. from 1st to 3rd Sts.; 19th St. from Washington to Adams Aves.; 3½ Alley, between 27th and 28th Sts.; 4th St. between 8th and 9th Aves.; plans, etc., from A. B. Maupin, City Engr.

W. Va., Princeton—Mercer County Court let contract to L. H. Davis, Willowton, W. Va., to build 2 mi. road from Hale's Gap to Willowton. Address County Commrs.

W. Va., Weston—Lewis County will extend Weston-Buckhannon road 1 mi. to Horner. Address County Commrs.

Sewer Construction

Ala., Mobile—City voted \$350,000 bonds for sewer and water extension. Address The Mayor. (Lately noted.)

Ark., Blytheville—Details under Road and Street Construction.

Ark., Fayetteville—City, will expend \$30,000 in extension to sewer system; will lay 8 to 12-in. vitrified or concrete pipe. Address The Mayor. (Lately noted.)

Ark., Forrester City—Forrester City Special Improvement Dist. let contract at \$22,000 to J. B. McCrary Engineering Corp., Atlanta,

Ga., for laying 28,000 lin. ft. of 6, 8, 10, 12 and 15-in. pipe sewer and constructing 80 manholes. (Lately noted.)

Ark., Fort Smith—City, W. H. Evans, Engr., will receive bids in about 60 days for extension to sewer system. (Lately noted.)

Fla., Jacksonville—Details under Water Works.

Fla., Leesburg—City, D. E. Bivens, Mgr., receives bids until Sept. 24 to furnish all material, equipment and labor for approximately two miles of 8-in. and one mile 4-in. house connections; H. S. Jaudon Engineering Co., Engrs., Elberton, Ga.

Fla., Miami—City, F. H. Wharton, Mgr. opens bids Sept. 18 to construct storm sewer, Contract No. 33 and 80; work consists of furnishing and laying approximately 310 ft. of 30x30-in., 264 ft. of 36x36-in., 295 ft. of 42x36-in., 542 ft. of 48x36-in., 1711 ft. of 48x30-in. concrete sewer; 1343 ft. of 12-in., 675 ft. of 15-in., 1954 ft. of 18-in., 665 ft. of 21-in., 437 ft. of 24-in. terra cotta pipe; 90 manholes; 65 inlets; 25,000 lbs. casting; plans, etc. with Charles W. Murray, Director of Public Service.

La., Bossier City—Details under Water Works.

Md., Baltimore—Board of Awards, Howard W. Jackson, Pres., opens bids Sept. 13 to construct storm water sewers in Dist. J-1 and other localities in Baltimore as embraced in storm water contract No. 59; work comprises approximately 6000 lin. ft. of storm sewers from 15-in. to 54-in. in diam. along with manholes and other appurtenances; plans, etc., at office of Bernard L. Crozier, Highways Engr.

Mo., Columbia—Board of Education let contract at \$12,672 to Simon Construction Co., to construct sewers on Benton and Douglas school grounds.

Mo., Marshall—City let contract to Ralph W. Langston, Springfield, Mo. to construct North Sanitary Sewer. (Lately noted.)

Mo., Mexico—City let contract to W. A. Hendrix & Son for constructing sewer on S. Union St. (Lately noted.)

Mo., St. Louis—Details under Land Developments.

N. C., Gastonia — Details under Water Works.

N. C., Roxboro—City, receives bids until Oct. 9 to construct sewer system, work consists of approximately 7½ miles of sanitary sewers, varying in diam. from 6 to 15-in. together with all manholes, Y and T branches and other appurtenances; plans at office of Mayor and at offices of Spoon & Lewis Engrs., American Bank Bldg., Greensboro, N. C.

N. C., Salisbury—Details under Water Works.

Okl., Oklahoma City—City Comn. let contract to Reinhart & Donovan Construction Co., Oklahoma City, to construct lateral sewer along Classen Blvd. from 45th to 50th Street.

S. C., Greenville—Details under Water Works.

S. C., Spartanburg—City will vote Sept. 25 on \$60,000 sewerage extension bonds, \$400,000 for street extension, paving and improvements. Address The Mayor.

Tenn., Cookeville — Details under Water Works.

Tenn., Union City—City will vote Sept. 25 on \$125,000 bonds for sewers and water works. Address The Mayor.

Tex., Beaumont—City will install sewer system in South Park and Cartwright sections. Address The Mayor.

Tex., Dallas—Details under Land Developments.

Tex., Houston—City let contract at \$18,000 to F. C. Yoeman, to construct sanitary sewer on San Jacinto St. from Southmore to Hermann Park.

Tex., Lubbock—City contemplates voting on \$500,000 bonds for storm sewers and street paving. Address The Mayor.

Tex., Marshall—Details under Water Works.

W. Va., Bluefield—City, Clarence E. Ridley, Mgr., receives bids until Oct. 9 to construct sewer system; work includes approximately 14 mi. of 6 to 48-in. pipe and segment block; 2 mi. reinforced conduit; 500 manholes 100 stone water inlets; 100 catch basins; 2000 ft. of ditch widening.

W. Va., Charleston—Details under Land Developments.

Telephone Systems

Miss., Jackson—Cumberland Telephone & Telegraph Co., J. Epps Brown, Pres., Atlanta, Ga., will expend approximately \$482,400 in the state during the next six months; expenditures for new additions and improvements during first six months of the year amounted to \$277,600, making a total of \$760,000 for the year 1923; W. A. Deale, Mississippi, Mgr.

N. C., Asheville—Southern Bell Telephone & Telegraph Co., 61½ Forsyth St., Atlanta, Ga. has taken over property of the Asheville Telephone and Telegraph Co.; R. N. Pfaff, Dist. Mgr.

Textile Mills

Ala., Anniston—Anniston Mfg. Co. will add approximately 8000 sq. ft. to mill, will rearrange and add new machinery; J. E. Sirrine & Co., Engrs., Greenville, S. C.

Ala., Eufaula—Cowikee Mills, Donald Comer, Pres., acquired Union Springs Mills; will repair building and equip with machinery for manufacture of single and ply coarse yarns; improvements will probably cost \$150,000; work under supervision of company.

Ark., Helena—Delta Land Co., (subsidiary of Parkhill Mfg. Co., Fitchburg, Mass.) will install 5000 additional spindles.

Ga., Barnesville—William Carter Co., 77 Summer St., Boston, Mass., acquired stock in Collier Mills, will reorganize company with \$250,000 capital and increase capacity of plant, install additional machinery, etc.

Ga., Carrollton—Mandeville Mills have acquired building and will remodel and install laundry equipment.

Ga., Tallapoosa—Details under Electric Light and Power Plants.

Md., Chestertown—Chestertown Development Co., capital \$10,000, organized with L. G. Brown, Pres.; J. H. Sides, Sec.; has site of 2 acres and will erect worsted mill, 60x140 ft.; will install boiler. (See Machinery Wanted-Boiler.)

Md., Chestertown—Maryland Worsted Mills, Inc., capital \$50,000, incorporated by Frank Rowland Hansell, Albert Gustav Bauer and others.

N. C., Burlington—Queen Anne Textile Co., capital \$1,000,000, incorporated by H. H. White of Petersburg, Va. and associates.

N. C., Spindale—Elmore Thread Co., capital \$125,000, incorporated by F. E. Elmore, K. S. Tanner and others.

S. C., Gaffney—C. M. Smith, Pres. of Merchants & Planters National Bank and Major Henry C. Moore, Pres. Globe Mfg. Co. are having plans prepared by J. E. Sirrine &

Co., Archts., Greenville, S. C. for erection of \$400,000 textile mill. (Lately noted.)

S. C., Great Falls—Republic Cotton Mills let contract for installation of electrical apparatus, power and lighting work in new weave shed to Huntington & Guerry, Electrical Contrs., Greenville, S. C.; contract includes installation of 1000-½ h. p. loom motors and approximately 250 other small motors for individual driving warpers, winders, silk spinners and cloth room machinery, also for construction of steel tower transmission line from mill to Great Falls hydro-electric plant of Southern Power Co. substation and village lighting electrical equipment from Westinghouse Electric & Mfg. Co.; J. E. Sirrine & Co., Engrs., Greenville, S. C.

S. C., Greenville—Wallace Manufacturing Co., Inc., capital \$700,000, incorporated with T. M. Marchant, Pres.; R. A. Lybrand, Sec.; will establish textile mill near Greenville.

Water Works

Ala., Mobile—Details under Sewer Construction.

Fla., Jacksonville—City contemplates voting on \$350,000 bonds for lights, streets, sewers, water mains. Address The Mayor.

Fla., Lake Worth—City let contract to H. M. Barney for construction of water and light plant.

Fla., Ocala—Details under Land Developments.

Fla., Pahokee—City votes Sept. 28 on \$100,000 bonds for water works, ice plant, electric light plant; and constructing road. Address The Mayor. (Lately noted.)

Fla., Seabreeze—Town Council let contract to Elwood G. Ladd of Jacksonville, to install water works; will extend mains through Kahnway Heights and Elpino Parque; estimated cost \$16,000.

Ky., Owensboro—City will extend water works, will vote in November on issuance of \$100,000 bonds. Address The Mayor.

La., Bossier City—City voted \$125,000 bonds for water works and sewers. Address The Mayor. (Lately noted.)

Md., Hancock—City, let contract to J. T. Bridges, Hancock, to construct water filtration system with capacity 500,000 gals. per day; cost \$18,000; J. B. Ferguson Co., Hagerstown, Md. and G. L. Bean, Abbot Bldg., Phila., Pa., Engrs. (Lately noted.)

Md., Poolesville—Town is contemplating installing 50,000 gal. tank. Address The Mayor.

Mo., Holden—City will vote Sept. 25 on \$68,000 bonds for improvements and extension to water works system. Address The Mayor.

Mo., LaGrange—City voted \$8000 bonds for improving water works system and paying off indebtedness on electric light plant. Address The Mayor.

Mo., St. Louis—Details under Land Developments.

N. C., Gastonia—City, B. H. Parker, Mayor, will issue \$200,000 bonds for combined water and light plant, and \$50,000 bonds for enlarging sewer system.

N. C., Monroe—City receives bids until Sept. 25 to erect 150,000 gal. steel tank on a 125 ft. tower and also for construction of 150,000 gal. concrete reservoir; plans etc. from Carolina Engineering Co., Engrs., Southern Bldg., Wilmington, N. C.

N. C., Salisbury—City will issue \$340,000 bonds for new streets, \$30,000 for sewers and \$35,000 for water works. Address The Mayor.

S. C., Greenville—Union Bleachery & Finishing Co., J. R. Sirrine & Co., Engrs., Greenville, is receiving bids for complete water and sewer system.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Tenn., Cookeville—City votes Sept. 29 on \$100,000 bonds for improving and extending water and sewer system. Address The Mayor.

Tenn., Knoxville—Details under Land Developments.

Tenn., Union City—Details under Sewer Construction.

Tex., Dallas—Details under Land Developments.

Tex., Fort Worth—City opens bids Sept. 25 to construct addition to plant increasing plant to 20,000,000 gal. daily capacity; cost \$200,000; John Hawley, Designing Engr., Fort Worth; John H. Gregory, Const. Engr., 3925 Canterbury Rd., Baltimore, Md.

Tex., Frisco—City voted \$40,000 bonds for water works improvements. Address The Mayor.

Tex., Greenville—City will expend approximately \$20,000 in construction of water main to supply outlying districts. Address The Mayor.

Tex., Highland Park, P. O. Dallas—North Highland Improvement League is having plans prepared by Myers & Noyes, Engrs., Dallas, for necessary mains and fire plugs for water system.

Tex., Kenedy—City, John W. Thames, Mayor, will extend and improve water works; voted \$30,000 bonds. (Lately noted.)

Tex., Marshall—City will vote Oct. 9 on following bond issues: \$10,000 for sidewalks; \$20,000 for sewers; \$50,000 for streets; \$80,000 for water. Address The Mayor.

Va., Bluff City—City plans installation of water works system; will probably vote on \$20,000 bonds. Address The Mayor.

W. Va., Charleston—Details under Land Developments.

Woodworking Plants

Miss., Jackson—Automobile Bodies—F. K. Paxton, of Bristol, Tenn. contemplates establishing plant for the manufacture of automobile bodies.

N. C., Hamlet—Crates, etc., P. B. Smith, care of Seaboard Hotel, contemplates establishing factory to manufacture peach and vegetable crates and baskets. (See Machinery Wanted—Crates and Baskets.)

N. C., High Point—O. L. Williams Veneer Co., capital \$100,000, incorporated by R. B. Terry, C. F. Williams, High Point; O. L. Williams, Sumter, S. C.

S. C., Columbia—Vogel Furniture Co., capital \$30,000, incorporated with M. N. Kneee, Pres.; L. P. Kneee, Sec.

Tenn., Memphis—Blocks, etc.—Charles O. Cox, Inc., capital \$40,000, incorporated by Charles O. Cox and J. R. Del Vecchio; has 5 acres site with factory under construction for the manufacture of wooden articles, specializing in persimmon wood blocks for golf clubs.

Va., Blackstone—Nottaway Shook Co., Inc., will probably rebuild burned plant, interested in box plant machinery or complete plant that might be moved as a whole. (See Machinery Wanted—Box Plant Machinery.)

FIRE DAMAGE

Ala., Anniston—Automobile, carriage and repair plant of G. H. Brummer & Co., on East 12th St.; loss not estimated.

Ark., Conway—W. W. Moore's cotton gin.

Fla., Panama City—Alabama Hotel, second St. and Harrison Ave.; Hills & Black, owners.

Ga., Atlanta—Atlanta Southern Baseball Association's grand stand, bleachers and clubhouse; loss about \$100,000.

Ga., Cordele—Crisp County Lumber Co.'s plant; loss approximately \$65,000.

Ga., Washington—W. A. Prather's cotton gin; loss \$7000.

La., Alexandria—Clements Alberts Bldg., Second and Washington Sts.; loss \$40,000.

La., Crowley—Thompson-Heiber's Hardware and Implement store; loss about \$12,000.

La., Greensburg—S. D. Morgan's saw, gin and grist mill; loss \$5000.

La., Independence—Independence Motor Co.'s garage and storage warehouse; loss \$20,000; George Mudland, Propr.

Md., Baltimore—Virginia Dare Candy Co.'s plant at 309 N. Howard St.; loss \$15,000.

Md., North East—Eugene T. Lucas' summer residence on North East River, 3 miles below North East; loss \$50,000.

Mo., Kirksville—Shryack Wholesale Grocery house and Kirksville Trust Company and 4 adjoining stores; loss \$425,000.

N. C. Henderson—Henderson Veneering & Manufacturing Co.'s plant; loss \$20,000.

N. C., Thomasville—Plant of Thomasville Knitting Co. and adjoining building; total loss estimated at \$100,000.

Okla., Cushing—White Manufacturing Company's building; Hancock Feed Store; loss \$50,000.

Okla., Norman—Security National Bank, Rucker's Dept. Store, Lewis & Taylor's store, McGinley Grocery store.

Tenn., Nashville—Nashville Paper Stock Co.'s building at Church St. and First Ave.; loss \$50,000.

Tex., Baird—T. E. Powell's warehouse.

Tex., Dawson—Buildings occupied by W. H. Culbreath Dry Goods Co., Dawson Hardware Co. and Simms Harness & Saddle Shop; loss \$40,000.

Tex., Galveston—48,000 bbl. capacity oil storage tank, owned by Southern Pacific R. R. operated by Rio Bravo Oil Co.; loss not estimated.

Tex., Orange—Three derricks of the Atlantic Oil & Producing Co.; loss \$100,000.

Tex., Wichita Falls—Orient Petroleum Co.'s 55,000 bbl. steel storage tanks; loss \$120,000.

Va., Blackstone—Plant of the Nottaway Shook Co., Inc.

Va., Clear Brook—Stewart Whetzel's public garage and service station; loss not estimated.

BUILDING NEWS BUILDINGS PROPOSED

Association and Fraternal

La., Monroe—Benevolent Protective Order of Elks plans to erect \$50,000 lodge building.

La., Rayville—C. R. Balfour Lodge No. 12, K. of P., will erect 2-story lodge building; J. W. Smith, Archt., Monroe, La.; bids opened Sept. 11.

Mo., Anderson—Odd Fellows Lodge plans to erect \$10,000 brick building; first floor for mercantile purposes, lodge hall above.

Tex., Fort Worth—Salvation Army will remodel Y. M. C. A. Bldg., Texas and Monroe Sts., for hotel; cost \$25,000; Chas. F. Allen, Archt., Touraine Bldg., Fort Worth.

Tex., Port Arthur—Masonic Building Assn. will erect \$125,000 building; 75x140 ft.; concrete and steel; fireproof; composition roof; cement and wood floors; stores on first floor, lodge rooms above; Wm. B. Ittner, Board of Education Bldg., Archt., St. Louis, Mo.; plans ready in about 30 days.

Bank and Office

Ala., Carbon Hill—Carbon Hill State Bank, J. T. Wakefield, Pres., will erect brick bank building.

Ala., Decatur—Young Men's Christian Assn. A. M. Hoff, member State and local Board, is considering erecting auditorium to accommodate 2000.

Ala., Tuscaloosa—Merchants' Bank & Trust Co., C. B. Verner, Pres., will erect 10-story and basement building, Broad St. and Greensboro Ave.; cost \$350,000, exclusive of equipment; 52x123 ft.; steel frame; brick and hollow tile; terra cotta trim; rift pine on concrete and tile floors; reinforced concrete foundation; tar and gravel roof; D. O. Whilldin, Archt.; Ingalls Iron Co., Contr. for steel work at about \$60,000; both Birmingham. (Contr. for foundation lately noted.)

Ark., El Dorado—Lion Refining Co., C. R. Wagner, Asst. Gen. Mgr., plans to erect office building; accommodate 150 to 200.

Fla., Jacksonville—Florida Baptist State

Board of Missions will erect \$100,000 building, Church St. adjoining Federal Reserve Bank; 4 stories; stone and brick; printing plant in basement for Witness Press, present location, 635 W. Forsyth St., Dr. J. W. Mitchell, Editor and Mgr.; H. J. Klutho, Archt., Jacksonville. (Previously noted.)

Ga., Macon—Macon National Bank, H. P. Heath, Vice-Pres., will not remodel building as lately reported, but plans to erect new building within two years.

Mo., St. Louis—Grand & Franklin Realty Co., J. E. Truitt, Pres.-Mgr., N. E. cor. Grand and Franklin Sts., plans to erect 10-story office building at same address.

N. C., Rockingham—Farmers Bank & Trust Co., Robt. L. Steele, Pres., plans to erect \$125,000 bank building; 3 stories; limestone; steel lined vaults; bronze and marble fixtures. (See Mch. Wanted—Clocks; Desks; Bank Furniture.)

Okla., Tulsa—Producers National Bank, T. J. Hartman, Vice-Pres., will erect \$150,000 building on site of old Rialto theatre; basement, main and mezzanine and second floors; 65 x 75 ft.; Ionic type; Carthage stone and gray terra cotta; pilasters; 4 vaults; space for 8000 safety deposit boxes; American walnut woodwork; Italian Rosette marble bank fixtures.

Tex., Tyler—Peoples Guaranty State Bank will erect \$43,000 bank building; 2 stories; 25 x 101 ft.; concrete, brick and stone; tile, insulate, hardwood and concrete floors; hollow fireproof and interior tile; plaster board; vaults; ornamental terra cotta; steel sash and trim; wire glass; forced hot air heat; bids opened about Oct. 1. Address Paul G. Silber & Co., Archts., San Antonio. (Lately noted.)

W. Va., Logan—Logan Lodge No. 1391, B. P. O. E., F. R. Remingen, Exalted Ruler and Chmn., Bldg. Comm., will erect \$75,000 lodge building; Hinchman and Hudgins Sts.; 54 x 80 ft.; 3 stories and basement; joist and concrete floors; concrete foundation; composition roof; R. I. Willett, Archt., Huntington;

bids soon invited, contract to be let Jan. 15. (Previously noted.)

Churches

Fla., Fernandina—Baptist Church plans to remodel and erect additions to building; cost \$20,000; stucco. Address The Pastor.

Fla., Fernandina—First Methodist Church. E. W. Bailey, Box No. 438, member Bldg. Comm., plans to erect \$30,000 to \$45,000 brick building, Center and 6th Sts. (See Mch. Wanted—Building Material.)

Mo., Carthage—First M. E. Church, South, will erect \$40,000 Sunday school building W. 7th St.; Gothic type; 2 stories and full basement; P. K. Simpson, Archt., Carthage; bids opened Sept. 17. (Previously noted.)

Mo., Springfield—Campbell St. M. E. Church, South, F. T. Jared, Chmn., Bldg. Comm., will erect \$70,000 auditorium adjoining present Sunday school building; 78x116 ft.; concrete, brick and stone; felt and slate roof; concrete and edge grain yellow pine floors; metal ceilings; ornamental terra cotta; Wells Heating Co. to install steam heating system, about \$4000; electric lights; Geo. F. Reed, Archt., Springfield. (Lately noted.)

Mo., Independence—First Presbyterian Church is considering erecting Sunday school annex. Address The Pastor.

N. C., Wilmington—St. Paul's P. E. Church, Rev. Alexander Miller, Rector, plans to remodel building.

N. C., Wilmington—D. H. Howes, Jr., R. W. Gilbert and C. G. Gilbert are trustees of newly organized Baptist Church; plan to purchase site and erect building.

Tenn., Chattanooga—Ridgedale Baptist Church, Dr. G. R. Walker, interested, plans to erect building, Dodds and Bailey Aves.

Tenn., Johnson City—Holston Assn. of Baptists will rebuild old Buffalo Ridge Baptist Church in Washington County near Johnson City; cost \$15,000; razing present structure.

Tex., Deport—Presbyterian Church will erect \$20,000 brick veneer and stone building; Curtis & Lightfoot, Archts., Paris.

Tex., Greenville—Church of Christ, C. Y. Fry, member Finance Comm., will erect \$15,000 brick building, Johnson and Hemphill Sts.

Tex., Houston—Magnolia Park Christian Church, Rev. David Lyon, Pastor, will erect \$40,000 building, Harrisburg Blvd. and 78th St.; 3 stories; red brick, shower baths, music conservatory; Sunday school rooms on first floor, auditorium to seat 500 on second; Collin W. Leavens, Archt., 1816 Chapman St., Houston.

Tex., Richland Springs—Christian Church plans to erect 4 Sunday school rooms or erect new church. Address The Pastor.

Tex., Wichita Falls—First Methodist Church, 19th and Lamar Sts., will erect \$225,000 main auditorium; brick, stone and steel; Sanguinet, Staats, Hedrick & Pate, Archts., Wichita Falls.

City and County

La., New Orleans—Prison, Courts Building, etc.—Grand Jury recommended repairing Orleans Parish prison at cost of \$75,000 or erecting new building, providing additional quarters for police Dept. in precinct No. 9, erecting central fire station on Poydras St. between Camp and Baronne Sts., and new criminal courts building to cost about \$200,000. Address The Mayor.

Mo., Greenville — Courthouse — Wayne County Comms. are considering calling special election on \$50,000 courthouse bonds.

N. C., Asheville—Courthouse—Buncombe County, E. M. Lyda, Chmn., County Com-

ms., will erect 2 additional wings to courthouse; cost \$100,000; fireproof; built-up roof; hollow fireproof and interior tile; concrete and hardwood floors; metal doors; ornamental terra cotta; steel sash and trim; wire glass; vacuum system of heat; conduit system electric wiring; Smith & Carrier, Archts., Asheville; let contract early next month.

N. C., Durham—Municipal Building—City, R. W. Rigsby, City Mgr., will remodel old Morris St. high school for municipal building; cost \$45,000; sanitary floors; hollow fireproof tile; metal doors; 6 vaults; ornamental terra cotta; improve present heating and lighting systems; Milburn-Heister & Co., Archts., Durham, and Union Savings Bank Bldg., Washington, D. C.; will let contract about Oct. 30. (Lately noted.)

N. C., Newton — Courthouse—Catawba County, J. D. Elliott, Chmn., County Comms., will receive bids until Sept. 20 at office of Willard G. Rogers, Archt., 205 Latonia Bldg., to erect fireproof courthouse; cost \$175,000; 60 x 140 ft.; 2 stories and basement; concrete, composition tile and cork floors; composition roof; interior tile; metal doors; vaults; ventilators; steel sash and trim; wire glass; electric lights; Warren Webster steam modulating and ventilating; plans on file at offices of Archt., Charlotte, Register of Deeds, Newton, and Chambers of Commerce, Greensboro and Charlotte. (Lately noted.)

N. C., Shelby—Jail—Cleveland County Board of Comms., A. E. Cline, Chmn., will receive separate bids until Oct. 10 for following contracts: (1) County jail building, (2) cells, window guards and steel doors, (3) jail complete, including building and cell work; 2 stories, 42 x 96 ft.; reinforced concrete floors and foundation; tile and composition roof; direct radiation steam heat; city lights; metal doors; ventilators; steel sash and trim; wire glass; plans and specifications from Wilson & Berryman, Archts., and on file at offices of Wilson & Berryman, Columbia, S. C., and Gastonia and Wilson, N. C.; Builders Exchanges, Atlanta, Ga., and Columbia, Chambers of Commerce, Charlotte, Greensboro and Raleigh, N. C., and office of County Comms., Shelby. (Lately noted.)

S. C., Spartanburg—Fire Station and Equipment—City, J. F. Floyd, Mayor, will vote Sept. 23 on \$500,000 bonds, including \$40,000 for fire station and equipment. (Lately noted.)

Tex., Brownwood—Auditorium—City voted \$50,000 bonds for memorial auditorium on Baker St.; 200x207 ft.; capacity 7000; basement for Isham A. Smith Post, American Legion. Address The Mayor. (Lately noted.)

Tex., El Dorado—Courthouse—Schleicher County, W. P. Ford, County Judge, will erect 3-story courthouse; concrete, steel and brick; Henry T. Phelps, Archt., Hicks Bldg.; S. A. Construction Co., low bidder at \$49,960 both San Antonio. (Lately noted.)

Tex., Fort Worth—Auditorium—City Hall—City, Mayor Cockrell, plans to erect combined municipal auditorium and city hall; drawing plans; may call bond election within 2 months.

Tex., Huntsville — Courthouse—Walker County, A. T. McKinney, Jr., Judge, will remodel and repair courthouse; new roof; metal ceilings, concrete floors, painting, etc.; John McLelland, Archt., 309 Woolworth Bldg., Houston; bids opened Oct. 9. Address Judge McKinney. (Lately noted.)

Dwellings

Ala., Brewton—W. G. Martin plans to erect residence on Douglas Ave.

Ala., Piedmont—City Board of Education, Geo. P. Haslam, Harold C. Sharpe, will erect

residence on high school campus for Supt. J. M. Atkinson; steam heat.

Fla., Miami Beach—Watson Corp., 213-14 Congress Bldg., Miami, will erect \$10,000, hollow fireproof tile and concrete dwelling, west side Prairie Ave.; hardwood floors; 10-yr. built-up roof; plans and construction by owner. (Lately noted.)

Fla., Ocala—Marion County Estates, Inc., C. E. Kiplinger, Pres., will expend \$25,000 to develop 300-acre tract and plans to erect number of 4 to 6-room dwellings, or construct to suit purchaser.

Fla., St. Petersburg—W. R. Barnhill purchased site, 23rd Ave., near Euclid Blvd., Broadway Addition, for residence.

Fla., St. Petersburg—August A. Burchy, will erect \$10,000 residence, Pass-a-Grille island Gulf front, between St. Petersburg and Pass-a-Grille.

Fla., St. Petersburg—R. L. Wingate plans to erect residence, 3rd Ave. near 29th St., Palmetto Park, South Side.

Ga., Columbus—Columbus Electric & Power Co. will erect 3 employees' cottages at Goat Rock.

Ky., Combs—Number Four Superior Coal Co. will erect 15 miners' houses; contract within 2 weeks.

Ky., Lennut—Maynard Coal Co. will erect 10 miners' houses; contract at once.

Ky., Sergeant—D. B. Franklin will erect five \$2000 dwellings; contract by Sept. 15.

Ky., Sergeant—John S. Webb will erect residence; contract at once.

La., New Orleans—W. Lubat will erect \$15,000 residence, Canal Blvd.

La., New Orleans—Geo. A. Dreyfous, L. L. & G. Bldg., will erect residence on tract between Pontchartrain shore and rear of Suburban Acres subdivision; Weiss & Dreyfous, Archts., New Orleans.

La., New Orleans—M. J. Sangasson will erect 4 duplex buildings, Elm and Cherokee Sts.; composition roofs; total cost \$16,000.

Md., Baltimore—Loyola Construction Co., Inc., 2500 Loyola Hgts. Ave., will erect 28 two-story dwellings, 2500-26 Loyola Southway; 25x35 ft.; brick; oak and concrete floors; asphalt built-up roof; hot water heat; electric lights; dumb waiters, 100-lb. capacity; interior tile; plans and construction by owner. (Lately noted.)

Md., Baltimore—Arthur E. Reinheimer, 32 South St., will erect 4 two-story, frame cottages, east side Charlotte Ave., south of Emmell Ave.; total cost \$15,000.

Md., Baltimore—J. Hurst Purnell, 4314 St. Paul St., will erect 18 two-story bungalows, 2000-34 Bentalou St.; total cost \$36,000; also 18 at 2001-35 Ruxton Ave.; total cost \$42,000.

Md., Baltimore—George Snader, 2220 E. Oliver St., will erect 5 two-story, frame cottages, N. W. side Pen Oak Ave., opposite Roland Ave.; total cost \$18,000.

Md., Baltimore—City Real Estate Co., 11 E. Fayette St., will erect \$14,000 five-room bungalow, N. W. cor Milford Ave. and Auburn Rd. and 1 on east side Milford Ave., opposite 55 N. Brightwood Ave.; also \$18,000 six-room bungalow, east side Milford Ave., opposite 315 N. Brightwood Ave.

Md., Baltimore—Oakford Realty Co., will erect 6 two-story frame dwellings, north side Oakford Ave., west of Garrison Ave.; 31x62 ft.; slate roof; total cost \$30,000; Geo. Wesel, Archt., 3001 Lyttleton Rd., Baltimore; owner builds.

Md., Baltimore—Edw. H. Apsley, Inc., 2808 Overland Ave., purchased Overbrook on Frederick Rd., and adjoining 10-acre tract and plans to erect 65 dwellings in groups of

5, construction to begin in fall; each to cost \$800 to \$10,000, including site.

Md., Baltimore—Frank Novak Realty Co., Gunther Bldg., will erect three 2-story dwellings and garages, 1701-05 Lakeside Ave., and six 1½-story cottages and garages, 1711-21 Lakeside Ave.; all frame; total cost \$60,000.

Md., Baltimore—Daniel Shipley, 1104 W. 36th St., will erect 10 two-story, brick dwellings, 1112-20 Falls Rd.; total cost \$40,000.

Mo., Fulton—D. W. Winn purchased lot on Grand St. and will erect bungalow in spring.

Mo., Fulton—Matt Wymore will erect bungalow in Westminster Place.

N. C., Winston-Salem—W. B. Carlton, Box No. 607, will erect \$13,000 residence on Sunset Drive; 8 rooms; hollow tile and face brick; tile roof; hardwood floors; C. Gilbert Humphries, Archt., Spring St.; Geo. W. Grotts, Contr., Sprague St.; both Winston-Salem. (Lately noted.)

Okla., Muskogee—Otis Kelly will erect 6-room English type bungalow, 15th St. and Broadway; rug-faced brick and open timber; stucco gables; zinc roof and trim; tile floor in sun parlor; built-in tile bath; built-in refrigerator; oak floors; laundry and Round Oak moist-air furnace in basement; Basham & Howenstein, Archts., Muskogee; excavation begun.

Okla., Tulsa—Adams & Reddin, Exchange Nat. Bank Bldg., plan to erect number of dwellings in fall.

S. C., Rock Hill—York Wilson will erect stone and stucco residence; A. D. Gilchrist, Archt., Rock Hill; bids opened Sept. 17.

Tex., Dallas—H. C. Curley will erect 6 dwellings in Kessler Square; 7 rooms; brick; total cost \$60,000; also \$4000, five-room, frame cottage for Temple Lbr. Co.

Tex., Dallas—H. K. Denton, Southwestern Life Bldg., will erect \$14,000 residence, County Club Addition.

Tex., Dallas—C. J. Farwell will erect \$18,000 residence on Avalon St.; 10 rooms; brick veneer.

Tex., Dallas—W. H. Jeremiah will erect \$17,000 residence, 2202 Carroll Ave.; 2 stories; brick veneer; natural stone trim; shingle roof; hardwood floors; tile baths; warm air furnace heating; Jas. B. Brown, Archt., Dallas.

Tex., Lubbock—H. L. Frost plans to erect dwelling on Broadway.

Tex., Lubbock—G. R. Herm, Snyder, Tex., plans to erect 3 dwellings on 16th St.

Va., Richmond—A. E. Dooley will alter residence, 416 W. Franklin St.; cost \$10,000; Lee & Lee, Archts., Richmond.

Va., Richmond—C. E. Hughes, 3021 Hawthorne Ave., will erect 2 stucco dwellings, 1412-14 Laburnum St.; 2 stories; 24x30x28 ft.; cinder block foundations; slate roofs; wood floors; hot water heat; total cost \$10,000; plans and construction by owner.

Va., Richmond—Max E. Ruehrmund, Allison Bldg., will erect 7 three-story dwellings, Stuart & Shepherd Sts.; 18x32x25 ft.; hot water heat; total cost \$50,000; also 8 two-story dwellings, 34th and N Sts.; 57x53x25 ft., 29x53x25 ft. and 30x53x25 ft.; Arcola system of heat; total cost \$85,000; all brick; concrete foundations; tin roofs; wood floors; plans and construction by owner.

W. Va., Charleston—Colonel R. S. Carr will erect \$12,000 residence on section of present homesite in South Hills.

Government and State

Md., Annapolis—Officers' Quarters, U. S. Naval Academy, Commander Kidd, in charge of bldgs. and grounds, will erect number of bungalow officers' quarters.

Md., Baltimore—State Office Building—Board of Public Works, Garrett Bldg., secured option on N. W. cor. St. Paul Place and Saratoga St., as possible site for building to house State offices in Baltimore.

W. Va., Charleston—Home—State Board of Control, J. S. Lakin, Pres., is considering erecting industrial home for colored girls on Orphans' Farm in Cabell County.

Hospitals, Sanitariums, Etc.

D. C., Washington—U. S. Veterans' Bureau, Frank T. Hines, Director, Room No. 791, Arlington Bldg., will receive bids until Oct. 4 for construction of recreation building and alteration and addition to garage for attendants' quarters at U. S. Veterans' Hospital No. 32, Mt. Alto, Washington, D. C.; work includes excavation and grading, concrete work, stucco, plaster, carpentry, painting and glazing, wrought iron work, plumbing, heating and electric work; drawings and specifications from Maintenance and Operation Division, Room No. 791, Arlington Bldg., and for inspection, at office Medical Officer in Charge, at site.

La., Plaquemine—Drs. Adrian A. Landry, R. R. Grant, and others, are interested in establishing hospital.

Miss., Jackson—Dr. J. L. Sutton is Chmn. of Comm. to prepare tentative plans for tubercular hospital for Hinds County.

Mo., Kansas City—Heart of America Hospital Assn., Inc., Clarence G. Witt, Pres., 512 Massachusetts Bldg., will erect 12-story general hospital, 31st. St. and Tracy Ave.; cost about \$2,000,000; fireproof; brick, stone and concrete; Jas. Oliver Hogg, Archt. Address Assn.

Tex., Beaumont—Ray & Dunlap, Wiess Bldg., will erect \$350,000 hospital; 120x80 ft.; 3 stories and part basement; roof garden; reinforced concrete construction; flat and tile roofs; floors not decided; steam heat; 2 main and 3 service elevators; Live-say & Wiedemann, Archts., Beaumont; drawing plans. (Lately noted.)

Tex., Dallas—Dallas Sanitarium, Inc., Dr. J. H. Groseclose, Supt., 807 Mercantile Bank Bldg., is erecting \$500,000 building as first unit of \$1,250,000 sanitarium, previously noted; 7 stories and basement; fireproof; reinforced concrete and brick; 114x160 ft.; reinforced concrete foundation; DeWitt & Lemmon, Archts., S. W. Life Bldg., Dallas; construction under Supt. (See Mch. Wanted—Boilers; Laundry Machinery; Kitchen Equipment (Dish Washing, etc.); Hospital Equipment.)

Va., Norfolk—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., will receive bids until Sept. 25 for construction of new doorways and gypsum block partitions and installation of pipe railings and wire grille partitions at U. S. P. H. S. Hospital, Tanner's Creek; drawings and specifications from Supt. of Construction at site or from office Supervising Archt.

W. Va., Maggie—State Board of Control, Jas. S. Lakin, Pres., Charleston, will erect 3-story and basement hospital for colored insane; cost \$275,000; 44 x 210 ft.; reinforced concrete, stone and brick; concrete, tile and composition floors; slag roof; steam heat, electric lights; hollow fireproof and interior tile; metal doors; ventilators; wire glass; Paul A. Davis, 3rd, and Dunlap, Archts., 1713 Sansome St., Philadelphia, Pa.; bids opened Nov. 1. Address Mr. Lakin. (Lately noted.)

Hotels and Apartments

Fla., Brooksville—Brooksville Hotel Co., will erect hotel; three stories; 50 rooms; fireproof; elevators.

Fla., Daytona Beach—Flagler Beach Hotel Co., D. F. Fuquay, A. B. Moseley, Daytona Beach; Claude G. Varn, George Moody and Rudolph Peterson, of Bunnell, will erect hotel; cost \$150,000.

Fla., Leesburg—Magnolia Hotel will erect one-story addition and solarium; cost \$18,000; new story, 32x88 ft.; solarium, 16x66 ft.; glass, except piers; brick; Barrett roofs.

Fla., Milton—R. J. Allen will erect hotel, 87x100 ft.; 2 stories; concrete; 27 rooms besides offices, stores and apartments.

Ky., Hazard—B. F. Cornett will let contract within ten days for \$10,000 apartment house on Broadway.

Ky., Hazard—J. P. Boggs will erect apartment house, E. Main St.; cost \$10,000.

Md., Baltimore—Allied Construction Co., 447 Equitable Bldg., will erect two 3-story brick apartment houses, Callow Ave., near Whitelock St.; cost \$60,000.

Md., Hagerstown—The Hagerstown Hotel Co., Young-Stickell Bldg., will erect building; cost \$700,000; 60x140 ft.; 12 stories; fireproof; hardwood floors; interior tile; metal doors; mail chutes; concrete floors; ventilators; ornamental terra cotta; rolling partitions; steel sash and trim; wire glass; Franklin P. Hammond, Archt., 565 Fifth Ave., New York. (Previously noted.)

Md., Hagerstown—Owen D. Sherley will erect addition to Vivian Hotel.

Mo., Kirksville—E. C. Brott is organizing company to erect \$200,000 hotel; 4 stories; Mr. Brott will also supervise construction.

N. C., Southern Pines—James Barber, Pinehurst and New York, S. R. Smith of New York, T. A. Kelly, Southern Pines, will erect hotel and other buildings at Lakeview.

Tenn., Nashville—Mrs. E. P. Murphy will erect apartment, 19th and West End Ave.; 16 rooms, 2-story; composition roof; foundation complete.

Tex., Dallas—Geo. Mayes will erect apartment house at 5301-03 Columbia St.; cost \$14,000; 4 apartments; 16 rooms; brick veneer.

Tex., Dallas—C. W. Rush will erect apartment house at 4921-23 San Jacinto St.; cost \$12,000; 4 suites of 4 rooms each; brick veneer.

Tex., Galveston—Jos. St. Mary will erect hotel; cost \$650,000; 50x328 ft.; 12 stories; concrete frame; tile roof; concrete, tile and insulite floors; steam heat; 5 elevators; hollow fireproof tile; interior tile; vaults; mail chutes; vault lights; ventilators; ornamental terra cotta; steel sash and trim; wire glass; Paul G. Silber Co., Archts., San Antonio.

Tex., Houston—J. M. Glover, Archt., is drawing plans for 6-story brick apartment building; cost \$300,000.

W. Va., Huntington—O. J. Deegan is interested in erection of 7-story apartment house; cost \$500,000; steel and concrete; roof garden and kindergarten.

W. Va., Huntington—O. J. Deegan will erect 7-story apartment; cost \$200,000; 60x80 ft.; roof garden and kindergarten; steel and concrete; built-in furniture, disappearing beds, incinerators, laundry; Richard M. Bates, Jr., Archt., Eleventh St., Huntington.

W. Va., Logan—C. W. Campnell, Huntington, W. Va., advises he has no plans for hotel and business block, as lately reported.

Miscellaneous

Ga., Savannah—Clubhouse—Homer F. Geiger and associates are promoting erection of clubhouse on 15-acre site at Coffee Bluff to be known as Riverside Club; swimming pool, bath houses, tennis courts, etc.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Ky., Louisville—Recreation Building—Standard Sanitary Manufacturing Co., will erect \$70,000 recreation building for employees at Shipp and Dubourg Sts.; 58x80 ft.; 4 stories; fireproof; flat slab, tar and gravel roof; interior tile; metal doors; concrete floors; vault lights; ventilators; steel sash and trim; wire glass; Joseph & Joseph, Archts., Francis Bldg.; Lewis W. Hancock, Contr., both Louisville.

Md., Baltimore—Sheds—The Lafayette Mill & Lumber Co. will erect 2 two-story frame sheds, Mosher and Brice Sts.; A. M. Benson, Archt.; Jas. J. O'Connor, Contr., 52 Knickerbocker Bldg., both Baltimore.

N. C., High Point—Cafe—Princess Cafe, North Main St., will improve and enlarge building.

Tenn., Knoxville—Club House—Swan-Land Golf and Country Club, capital \$150,000; will erect club house, provide 150-acre golf course, reservoir, power house, etc.

Tex., Dallas—Fair—State Fair Association will erect 8 racing barns; cost \$25,000.

Tex., Fort Worth—Clubhouse—Northern Texas Traction Co. will erect \$50,000 clubhouse, Front and Pine Sts.; 100x80 ft.; 2 stories; brick and reinforced concrete; 1st floor, lockers; 2nd floor, auditorium.

Tex., Fort Worth—Clubhouse—Neil P. Anderson Co. will erect 2-story clubhouse, near Lake Worthy; cost \$20,000; rock walls; shingle roof; oak floors; Delco light system; Joseph Pelich, Archt., Fort Worth.

Tex., Fort Worth—Dining Hall—Masonic Orphans Home will erect dining hall; cost \$70,000; 18,000 sq. ft.; reinforced concrete; tar and gravel roof; linoleum tile and cement floors; W. G. Clarkson & Co., Archts., First National Bank Bldg., Fort Worth.

Railway Stations, Sheds, Etc.

Fla., Arcadia—Atlantic Coast Line R. R., J. E. Willoughby, Ch. Eng., Wilmington, N. C.; Charlotte Harbor and Northern R. R., T. G. Brantley, Ch. Eng., Arcadia, and E. & W. Coast R. R., W. L. Seddon, Gen. Mgr., Norfolk, Va., will erect union depot.

N. C., Selma—Atlantic Coast Line R. R., J. E. Willoughby, Ch. Engr., Wilmington, will receive bids until Sept. 17 to erect joint passenger station for Atlantic Coast Line and Southern railroads; passenger station, tower and train sheds; A. M. Griffin, Archt.

Schools

Ala., Eufaula—School Board will erect high school; Frank Lockwood, Archt., Montgomery, Ala.; bids opened Sept. 18.

Ala., Fairfield—School Board will erect junior and senior high school combined and a grammar school.

Fla., Coconut Grove—Coconut Grove Special School Tax Dist. No. 5 plans to erect 2 buildings; will vote on \$25,000 bonds. Address Dist. School Trustees.

Fla., Ft. Lauderdale—Herbert L. Malcolm, Prin. and owner of Lake Placid School for Boys, will erect administration building.

Ky., Greenville—School Trustees, Jno. C. Schamel and others, will erect building at Galena to replace burned structure; cost \$20,000; brick and stone.

Ky., Oneida—Oneida Baptist Institute will erect addition to Marvin Hall; auditorium, 50x60 ft.; laboratory, 20x50 ft.; library, 30x35 ft.; 9 class rooms.

Ky., Winchester—School Board will receive bids at office Superintendent of Schools until Oct. 4 to erect high school, grade school and colored school; plans and specifications at office Richard M. Bates, Jr., Archt., 414 11th St., Huntington, W. Va.

La., Baton Rouge—Louisiana State University will erect memorial tower; 162 ft. high; bids opened Sept. 23.

La., East Point—Red River Parish School Board will erect \$60,000 school; 2 stories; brick, concrete and heavy joist; composition roof; wood floors; low pressure steam heat; Wm. T. Nolan, Archt., Canal-Commercial Bldg., New Orleans.

La., Spring Creek—School Board will erect school; cost \$15,000; J. W. Smith, Archt., Monroe.

La., Winnfield—Winn Parish School Board will erect Curry School; cost \$15,000; J. W. Smith, Archt., Monroe.

Miss., Brookhaven—Board of Trustees of Brookhaven Separate School District will erect school; bids open Sept. 25; Emmett J. Hull, Archt., Daniel Bldg., Jackson, Miss.

Mo., Plattsburg—Board of Education rejected bids and will call for new bids for high school.

Mo., Washburn—Washburn School Dist. Trustees will erect building; \$10,000 bonds voted.

N. C., Atkinson—Pender County School Board will erect school; 16 rooms and auditorium; brick and frame; Leslie N. Boney, Archt., Wilmington, N. C.; bids open Sept. 20.

N. C., Longcreek (R. D.-Rocky Point)—Pender County School Board will erect school; 10 rooms and auditorium; brick and frame; Leslie N. Boney, Archt., Wilmington, N. C.; bids open Sept. 20.

N. C., Raleigh—Board of Education, S. R. Srygley, Supt., will erect Caraleigh and Pilot Mills schools; cost \$40,000 each.

N. C., Raleigh—North Carolina State College will erect addition to textile school; 75x75 ft.; 3 stories; J. E. Serrine & Co., Archts., Greenville, S. C. (Lately noted.)

N. C., Vass—School Board plans to erect school; cost \$50,000; brick; J. M. Kennedy, probable Archt., Raleigh, N. C.; election on bonds Sept. 22. (Lately noted.)

Okla., Albion—Albion School Dist. No. 2, will erect auditorium; Sloman King, Pushmataha County Supt., Antlers, Okla.

Okla., Oklahoma City—Oklahoma Agricultural and Mechanical College will erect animal and poultry husbandry departments.

Okla., Picher—School Board—L. E. Thornton, Pres., will erect addition to school; cost \$20,000; 4 rooms, study hall, class rooms, superintendent's office.

S. C., Mayo—School Board will erect teacherage and enlarge school.

S. C., St. Matthews—Trustees, School district No. 8, Dr. J. K. Farey, Chmn., will receive bids until Sept. 17 to erect high school and grammar school; plans and specifications at office F. H. & J. G. Cunningham, Archts., Greenville, S. C.

Tex., Arcadia—Board of Education plans to erect brick school; cost \$10,000; C. N. Leinbach, Archt., 503 Deere Bldg., Dallas.

Tex., College Station—Agricultural and Mechanical College of Texas will erect administration building; cost \$100,000; combination hotel and dormitory, \$75,000; both structures 2 stories; brick; also construct deep water well, \$20,000, contract for which has been let to Layne & Bowlen, Houston; greenhouse, \$10,000; dairy building \$20,000; repairs to Gathright Dormitory, \$15,000; plans by E. B. La Roche, Archt., at college? (Lately noted.)

Tex., Dallas—Omega Phi Fraternity will erect brick veneer house, Southern Methodist University; cost about \$20,000; C. D. Hill & Co., Archts., Dallas.

Tex., Denton—Board of Trustees of Denton City Schools, Dr. T. C. Dobbins, Pres., will receive bids until Sept. 11 (extended date) to erect high school; cost \$110,000; 16,000 sq. ft.; 12 rooms and auditorium; 1 story; reinforced concrete; tar and gravel roof; wood, tile and cement floors; steam heat; plans and specifications at office W. G. Clarkson & Co., Archts., First National Bank Bldg., Fort Worth. (Lately noted.)

Tex., Eagle Lake—Board of Trustees, W. A. Dallas, Sec., will receive bids until Sept. 20 to erect 2-story high school; cost \$105,000; reinforced concrete, brick and tile; concrete slab and built-up roof; concrete slab, mastic, wood and tile floors; steel sash; metal trim; steam heat; floor space 1st floor, 16,920 sq. ft.; 2nd, 12,900 sq. ft.; bids also to erect one-story brick negro school; 5 rooms; plans and specifications at office Giesecke & Harris, Archts., Littlefield Bldg., Austin, Tex.

Tex., Hull—School Board rejected bids and will call for new bids to erect high school building. (Lately noted.)

Tex., Marshall—City, H. S. Rice, Sec., will vote Oct. 9 on \$250,000 school building bonds.

Tex., Nederland—Nederland Independent School District, J. M. Morgan, Act. Pres. Bd. of Trustees, will erect high school; cost \$60,000; 130x130 ft.; 3 stories; brick, hollow tile and wood; gravel and prepared roof; wood and mastic floors; vacuum steam heat; electric wiring; vault door; R. H. Hunt Co., Archt., Dallas, Tex., and Chattanooga, Tenn., (E. O. Taylor, Representative, 1802 Orange St., Beaumont, Tex.); bids opened Sept. 10. (Lately noted.)

Tex., Tyler—Tyler School Board will improve negro school, North Border St.; install heating and sewerage systems; also remodel basement for 5 class rooms.

Va., Lexington—Kappa Alpha Fraternity, Washington and Lee University, will erect Foundation Building.

Stores

Fla., Miami—A. L. Hefinger will erect 4-story building, S. W. Third St.; cost \$10,000.

Fla., Miami—The Tatum Business Properties, Inc., will remodel building at Flagler and S. E. Second Ave.; cost \$40,000; first floor, store; 2nd floor, offices.

Fla., Tallahassee—Wm. S. Hodges will erect office and store building, Pensacola and Monroe Sts.

Ky., Hazard—Jno. L. Shepherd will erect building, Main St.; cost \$15,000; contract at once.

Ky., Mayking—T. S. Sherman will erect store; contract at once.

La., New Orleans—United Cigar Stores Co. will remodel store fronts; cost \$40,000; bids opened Sept. 10.

La., Shreveport—J. Katzenstein, Leon B. Loeb and Sam Weiner will receive bids until Sept. 15 to erect department store at Texas Ave. and Louisiana St. to be operated by Feibleman & Co., New Orleans; cost \$300,000; 4 stories and basement; 81x150 ft.; rough face brick; sandstone trim; two elevators; rest room and cafeteria on roof; Jones, Roessle, Olchner & Weiner, Archts., Shreveport. (Lately noted.)

Md., Baltimore—Chas. McKewin, 2814 Harford Ave., will erect store and dwelling, 701 E. McKewin Ave.

S. C., Sumter—Woolworth Corporation will remodel old D. J. Chandler Clothing Co. building; new basement, floors and other interior improvements.

Tenn., Knoxville—Knoxville Property Co., incorporated with \$100,000 capital, Eugene

Galyon and others, will erect number of business buildings.

Tenn., Knoxville—Miller Store Co., Union Ave., will improve store; R. F. Graf & Sons, Archts. and Structural Engrs., Knoxville.

Tex., Cameron—Milam County Hardware Co. will erect 1-story brick store.

Tex., Dallas—French Davis plans to erect 2 stores, Lemmon Ave.; brick; pitch and gravel roof; concrete floors; plate glass; plumbing; electric wiring.

Tex., Dallas—J. E. Lyons will erect one-story brick building, 1313 Davis St.; cost \$15,000.

Theatres

Fla., West Palm Beach—H. C. Daniels will erect new Kettler theater; cost \$90,000.

S. C., Florence—M. F. Schnibbens will improve Opera House to include seating, repairs to lobby, walls, etc.

Va., Danville—E. C. Arey will remodel building formerly used as Metropolitan Billiard Parlors for theatre.

Warehouses

Fla., Miami—Hector Supply Co. will erect addition at E. side of S. Miami Ave.; 60x131 ft.; concrete and tile; cost \$16,000; J. Philip Turner, Archt., Miami.

Ky., Owensboro—Robertson, Bayle & Wison will erect building, Ninth and Maple; cost \$60,000.

Ky., Owensboro—I. H. & H. N. Robertson will erect building, Ninth St.; cost \$30,000.

N. C., Salisbury—Warehouse Corporation will erect building; C. P. Wharton, Greensboro; P. N. Peacock, Salisbury, incorporators.

Tenn., Greeneville—Planters' Tobacco Warehouse Co. will erect addition to plant on W. Church St.

City and County

Ark., Hamburg—Courthouse—Ashley County will erect courthouse; 50x100 ft.; brick and reinforced concrete; tile, concrete and wood floors; composition roof; steam heat; Thompson & Harding, Archts., Little Rock; T. R. Bethea, Contr., Fordyce. (Lately noted.)

N. C., Nashville—Jail and Home—Nash County will erect jail at Nashville and county home buildings, 1.4 miles from Nashville on Nashville-Rocky Mount Highway; total cost about \$124,000; brick walls, 2-inch solid partitions, metal joists; concrete, wood and composition finish floors; tin roofs; city lights; Benton & Benton, Archts., Wilson; D. J. Rose & Son, Contrs., Rocky Mount; heating let separate. (Lately noted.)

Tex., Groesbeck—Courthouse—Limestone County will erect \$300,000 courthouse; fireproof; 3 stories and basement; 144x234 ft.; reinforced concrete, brick and Bedford stone; Midwest Engineering Co., Archt., W. M. Rice Constr. Co., both Amarillo, Tex. (Previously noted.)

BUILDING CONTRACTS AWARDED

Association and Fraternal

Ky., Louisville—Kosair Temple, A. A. O. N. M. S., Paul Compton, Chmn., Bldg. Comm., will erect Oriental type Shrine Temple; club and hotel section to be constructed at present; cost about \$650,000; 216x200 ft.; 7 stories in part; reinforced concrete; exterior of semi-glaze finish terra cotta; composition roof; 135 hotel rooms; ultimate cost of structure about \$1,500,000; banquet hall in basement to seat 2500; Joseph & Joseph, Archts.; C. A. Koerner & Co., Contrs.; both Louisville.

Tex., Houston—Young Women's Christian Assn., Mrs. Harris Masterson, Chmn., Bldg. Comm., will erect \$158,410 residence hall, Dallas St. and Crawford Ave.; 3 stories; fireproof; U-shape; wings connected by stone and ornamental iron loggia; R. P. Briscoe, Archt., Carter Bldg.; Southwestern Construction Co., Contr.; Branard & Son, plumbing and heating, \$24,400; Allan Cooke, electrical work, \$5480; Way Engineering Co., refrigerating contract, \$4972; all Houston; laundry contract not let. (Lately noted.)

Bank and Office

La., Minden—Louisiana & Arkansas R. R., W. F. Salisbury, Ch. Engr., Stamps, Ark., will erect office building; O'Neill & Sons, Contrs., Hope, La.

La., Shreveport—Southwest Gas Co. will erect \$82,600 fireproof building; 2 stories; 60x150 ft.; reinforced concrete; Edw. F. Nield, Archt., 1206 Merchants Bldg.; W. H. Werner, Contr.; both Shreveport. (Lately noted.)

N. C., Kinston—J. C. Rasberry, Cobb Bldg., will erect 3-story office building on old Bailey site, S. Queen St.; cost \$20,000; store on first floor; plans by Mr. Rasberry; J. H. Evans, Contr., 106 W. Bright St., Kinston.

Tenn., Dyersburg—First Citizens National Bank, Dr. J. A. Green, hmn., Bldg. Comm., will erect \$137,000 bank and office building; 8 stories; 50x60 ft.; reinforced concrete, brick veneer, stone and terra cotta; built-up 20-yr. roof; concrete and marble floors; hollow fireproof and interior tile; metal doors; vaults; vault lights; ventilators; ornamental terra cotta; steel sash and trim; wire glass; Raymond B. Spencer, Archt.; Thomas & Son, Contrs., both Memphis; R. H. Vandervelt & Co., heating, \$17,000; Electric Supply & Engineering Co., electrical work, \$37,050, both Dyersburg. (Other contracts lately noted.)

Va., Abingdon—Peoples' National Bank will erect 4-story building, Wall St.; cost \$70,000 completed and furnished; Indiana limestone for first story, pressed brick above; steel frame; 50x45 ft. banking room; marble and brass fixtures; 27 offices on 3 upper floors; Beeler & Co., Contrs., Johnson City, Tenn. (Lately noted.)

Churches

Ala., Rockford—Baptist Church, Rev. A. E. Page, Pastor, Leeds, Ala., will erect \$10,000 building; 48x64 ft.; concrete and stone; hardwood floors; plans by Mr. Page; J. K. Leroy, Contr., Rockford. Address Mr. Page. (Lately noted.)

N. C., Raleigh—First Christian Church, L. L. Vaughn, Chmn., Bldg. Comm., will erect \$100,000 building, Hillsboro and Dawson Sts.; stone; hardwood floors; ventilators; rolling partitions; main and Sunday school auditoriums, combined, to seat 1000; G. Murray Nelson, Archt., Raleigh and Durham; J. A. Davidson, Contr., Raleigh. (Previously noted.)

N. C., Rocky Mount—First Presbyterian Church will erect \$45,000 Sunday school building; 40x88 ft.; brick; steel beams, wooden joists and partitions; built-up felt and gravel roof; pine, concrete and mastic floors; hollow fireproof tile; metal doors; enlarge present heating plant; Herbert L. Cain, Archt., Richmond, Va.; D. J. Rose & Son, Contrs., Rocky Mount; lighting in general contract.

Tex., Beaumont—Phillips Chapel, A. M. E. Church, Rev. J. H. Douglas, Pastor, 1370 Ewing St., will erect \$32,000 building; 54.6x66.6 ft.; pressed brick and stone; tile and copper roof; concrete and wood floors; gas heat, \$250; lighting, \$200; W. B. Landes, Contr., 4001 Joachimi St., Beaumont. (Lately noted.)

Tex., Port Arthur—First M. E. Church, South, will erect third floor and roof garden of Sunday school building; concrete and hollow fireproof tile walls; tile roof in asphalt; quarry tile; metal doors; concrete floors; Paul G. Silber & Co., Archts., San Antonio; H. W. McCord, Contr., Port Arthur. (Lately noted.)

W. Va., Mullens—First Baptist Church will erect first unit of building; cost \$15,575; 55x35 ft.; Early Bros., Contrs., Mullens; plan to erect second unit later.

Dwellings

Ala., Scottsboro—Methodist Church will complete brick parsonage; foundation and basement already in; F. D. Webb, Contr., Scottsboro.

Fla., Miami Beach—J. V. Daniels, Chicago, will erect \$30,000 residence and garage, 1023 Pennsylvania Ave.; 58x55 ft.; reinforced concrete foundation; Spanish stuccoed block walls; Mission tile roof; oak and tile floors; interior tile; Lee L. Wade, Archt.; A. B. Wade & Son, Contrs., both Miami. (Lately noted.)

Fla., Miami Beach—Carl J. L. Dittman, Miami, will erect \$18,000 residence and garage, Lennox Ave. and 17th St., Palm View subdivision; J. O. Williams, Archt.; Dittman Engineering & Constr. Co., Contr., both Miami Beach. (Lately noted.)

Fla., Ocala—Clarence Camp will erect residence on 5th St.; 1½ stories; stucco; tile trim; Geo. Mackay & Co., Archts.-Contrs. (Lately noted.)

Fla., Sebring—Geo. E. Sebring, Sebring Real Estate Co., is interested in erection of 100 dwellings; Ed. L. Hinz in charge of construction.

Md., Baltimore—Morris Kohn, The Sheffield, will erect 21-2-story brick residence; west side Park Ave., near Park Terrace; Daniel Sackerman, Archt.-Contr., Baltimore St., near Calvert St., Baltimore. (Lately noted.)

Md., Baltimore—Jas. S. Whiteley, Keyser Bldg., will erect 2½-story and basement residence, Guilford; cost about \$60,000; 61x77 ft.; brick and stone; frame interior; concrete and quartered oak floors; slate roof; interior tile; plaster board; Laurence Hall Fowler, Archt., 347 N. Charles St.; North-Eastern Construction Co., Contr., Lexington Bldg., both Baltimore.

Mo., Poplar Bluff—Earl Chambers will erect residence; Romey Dalton, Contr., Poplar Bluff.

N. C., Charlotte—Martin L. Cannon, Concord, N. C., will remodel residence, 520 E. Morehead St.; cost \$10,000; W. H. Peeps, Archt.; E. H. Clement Co., Contrs.; both Charlotte.

S. C., Kress—(Not a Post Office)—S. H. Kress will erect 20 gardeners' bungalows on bulb farm; 35 x 28 ft. each; baths; will also erect 2 overseer's dwellings; each 40 x 60 ft.; 2 baths; Snedeker Co., Contr., Savannah.

Tex., Paris—Eugene Williams will erect

\$16,000 residence; 2 stories; Curtis & Lightfoot, Archts.; A. G. Greiner, Contr., both Paris.

Tex., Wichita Falls—C. I. Francis will erect residence in Morningside Park; face brick; tile roof; stone trim; Voelcker & Dixon, Archts.; Reid & Costley, Contrs.; Hoffman & Co., plumbing and heating, all Wichita Falls.

Va., Richmond—W. B. Page, 1101 W. Franklin St., will erect 2 brick dwellings, 1200 block W. Franklin St.; 44x60x24 ft.; 2 stories; brick foundation; wood floors; hot water heat; total cost \$30,000; Jas. Fox & Sons, Contrs., Richmond.

W. Va., Coalwood—Consolidation Coal Co. will erect 56 four and five-room tenement houses; H. F. Giffin, Archt.; J. M. Kisner & Bro. Lbr. Co., Contrs., both Fairmont. (Lately noted.)

Government and State

Fla., Bartow—Armory, etc.—Bartow Headquarters Detachment and Field Combat Train Co., 116th Field Artillery Regt., Nat. Guard, Roger B. Lyle, Capt., let contract to erect sheet iron armory, barracks and stables in ball park; shower baths, lockers, gymnasium, etc.

Hospitals, Sanitariums, Etc.

Ga., Atlanta—City, W. P. Price, Pur. Agt., will erect additions to and alter Grady General Hospital, consisting of Elsas Free Clinic, etc.; cost \$40,000; frame; mastic and maple floors; steam heat, \$3397; Hentz, Reid & Adler, Archts., 921-2 N. Forsyth St.; Paul Wesley, Contr., Candler Annes; both Atlanta. (Lately noted.)

N. C., Charlotte—Mecklenburg-Cabarrus Baptist Assn., Rev. L. R. Pruette, Pastor, Ninth Ave. Baptist Church, Chmn., will erect 100-room annex to Baptist Hospital, formerly known as Tanquill Park Sanatorium; Goode Construction Co., Contr., Charlotte. (Previously noted.)

Tex., Houston—Baptist Hospital will erect \$250,000 addition for women and children; 76x106 ft.; 8 stories; reinforced concrete frame, brick and terra cotta walls; Barrett built-up roof; terrazzo, tile and marble floors; R. D. Steele, Archt., First Nat. Bank Bldg., Houston; Henger & Chambers Co., Contrs., 315-18 Slaughter Bldg., Dallas; Gill & Lewis, heating, \$78,000; Jacob Bros. Elec. Co., electrical work, \$13,500; both Houston; elevators, about \$19,000, not let. (Lately noted.)

Hotels and Apartments

Fla., Miami—J. W. Ricketts has contract to erect 50-room hotel in Coral Gables; Moorish architecture; tile roof; number of balconies, fountains, gardens, etc.; Martin L. Hampton, Archt., Miami.

Tex., Dallas—J. R. Anderson will remodel residence at 4719 Junius St. for duplex apartment; cost \$10,000; Geo. Kean, Contr., Dallas.

Tex., Houston—Sam Houston Hotel Co., Carter Bldg., will erect hotel; cost \$1,000,000; 10 stories; L shape; 100x100 ft.; 2 wings; 36 ft. wide; 205 rooms with bath; reinforced concrete frame; face brick and stone exterior; Sanguinet, Staats, Hedrick & Gottlieb, Archts., First Nat. Bank Bldg.; Don Hall, Contr., both Houston.

Tex., Houston—Mrs. L. B. Rambaud, La Branche St., will erect 16-room brick veneer apartment building; cost \$20,000; L. W. Lindsay, Contr., Houston.

W. Va., Charleston—R. G. Linn Estate will erect building, Tennessee Ave., for 2 store rooms and 2 apartments; Herbert Kyle, Archt.; J. H. Love, Contr., both Charleston.

Miscellaneous

S. C., Greenville—Home-Girls' Protective Bureau, E. Court St., Mrs. W. P. Conyers, Chmn. of Board, will erect \$12,000 building on Laurens road; concrete or brick foundation; 8 bedrooms; 3 sleeping porches; kitchen; 80x50 ft.; frame and masonry; wood shingles; plaster board; concrete and pine floors; ventilators; steam heat; Beacham & LeGrand, Archts., Greenville; Piedmont Construction Co., Contr., Easley, S. C. (Lately noted.)

Railway Stations, Sheds, Etc.

S. C., Florence—American Railway Express Co. will erect \$30,000 building; 50x100 ft.; reinforced concrete; brick; tile roof; Harper & Son, Contrs., Sumter, S. C.

Schools

Ala., Carlowville (P. O. Minter)—School Board will erect building; cost \$20,000; 6 rooms, auditorium, manual training; brick; composition shingle roof; wood floors; jacketed heaters; Delco lights; W. E. Ward, Contr., Pine Apple, Ala.

La., Johnson—Morehouse Parish School Board, Bastrop, will erect building; cost \$20,000; 2 stories; brick; slate roof; J. W. Smith, Archt., Monroe; Jno. McClernon, Contr., Oak Ridge. (Lately noted.)

Mo., Willow Springs—Board of Education, J. C. B. Davis, Pres., will erect high school, lately noted; cost \$40,000; 78x110 ft.; brick, tile and concrete; hollow fireproof tile; tar and gravel roof; wood and concrete floors; steam heat; Heckenlively & Mark, Archts., Springfield; John O. Brown, Contr., Willow Springs. (See Machinery Wanted—Hoist.)

N. C., Smithfield—H. R. Marrow, Johnston County Supt., will rebuild Corinth-Holder school, O'Neal Township, recently wrecked by explosion; Walter Clark, Contr., Wilmington, N. C.

Tenn., Shelbyville—Board of Education, W. C. Jordan, Chmn., will erect high school; cost \$32,550; 119x72.10; 2 stories; brick veneer; built-up composition roof; concrete and wood floors; C. K. Colley, Archt., 4th and First National Bank Bldg., Nashville; F. J. Wallheiser, steam heating, \$4500, and knob and tube system of lighting, \$250. Address F. P. Hix, Contr., Shelbyville. (Lately noted.)

Tex., Denton—Texas State Teachers' Colleges, M. O. Flowers, Pres., Board of Regents, Lockhart, Tex., will erect administration building at North Texas Teachers' College; cost \$232,275; 3 stories; fireproof; Barrett roof; cement, tile, wood and some tile covered floors; C. H. Page & Bro., Archts., Austin; Bellows-Maclay Const. Co., Contr., Dallas; Kirkwood & Wharton, San Antonio, \$4760 for electrical fixtures; Montrief & Montrief, Galveston, \$3839 for plumbing; J. C. Koroith, Sherman, \$12,558 for heating. (Lately noted.)

Tex., Desdemona—Independent School District will erect grade school; cost \$18,000; one story; 72x103; brick and concrete; steel lath partitions; tar and gravel roof; granolithic floors in halls and toilets; wood floors in class rooms; steam heat; conduit system of wiring; electric program clock; metal ceilings; ventilators; wire glass; A. B. Withers, Archt., First Nat. Bank Bldg., Mineral Wells, Texas. Address Sam Barley, Contr., Gordon, Texas.

Tex., Graford—School Board will erect school; 1 story; brick; Huseman & Co., Archts., 1008 Burk Burnett Bldg., Fort Worth; Clay Riggers, Contr., Graford. (Lately noted.)

Tex., Iowa Park—Board of Education will erect high school; cost \$80,000; 2 stories;

brick and stone; Carr & Blakemore, Gen. Contrs., Wichita Falls; brick work, Ray Okey; concrete work, H. K. Roberts; brick, Wichita Falls Brick & Tile Co.; roofing, Wichita Builders Supply Co.; metal ceilings and sheet metal work, Ray Sheet Metal Works; plastering, F. E. Shoop; painting, W. J. Barrett, all of Wichita Falls; structural and reinforced steel, Austin Bros., Dallas; cut stone, David Hughes, Fort Worth; steel sash, Dallas office of Truscon Steel Co., Youngstown, Ohio. (Previously noted.)

Tex., Paris—Forest Chapel School District, A. K. Haynes, Pres., Razor, Tex., will erect building; cost about \$10,000; 60x100 ft.; frame; shingle roof; wood floors; heaters; electric, Delco or similar lighting plant; Curtis & Lightfoot, Archts., Paris. Address Powell & Copeland, Contrs., care of Mr. Haynes, Razor. (Lately noted.)

Stores

Md., Baltimore—Union Bros. will erect three-story brick building, 37 W. Cross St.; cost \$30,000; 50x140 ft.; slag roof; steam heat; S. Russell, Archt., 11 E. Lexington St.; Louis Ulman & Co., Contrs., 418 Asquith St., both Baltimore.

Mo., Springfield—W. L. Garrett & T. E. Whitlock will erect store and hotel building; cost \$45,000; 45x100 ft.; fireproof; reinforced concrete; hollow fireproof tile; brick and stone; composition roof; cement floors; Earl Hawkins & Co., Archts., 400 McDaniel Bldg.; Will W. Johnson, Contr.; Wells Heating Co., steam heat; Ford Bros. Co., electric wiring; all Springfield. (Lately noted.)

Tex., Dallas—Geo. Shropolous will erect brick store; cost \$20,000; C. E. Martin, Contr., Dallas.

Tex., Dallas—H. A. Berger and J. P. Bounds will erect 1-story brick building, Carroll and Worth Sts.; cost \$17,840; Stearns & Son, Contrs., Dallas.

Warehouses

Fla., St. Petersburg—Carmen & Co., Tampa, have contract to erect warehouse and garage, Eleventh St. and Third Ave., at \$12,975 for terra cotta and \$12,700 for concrete block.

Fla., West Palm Beach—F. W. Woolworth & Co., Inc., will erect building; cost \$40,000; brick and steel; cement and tile floors; C. L. Moss, Archt., St. Petersburg; Franklin J. Mason, Inc., Contr., St. Petersburg, Fla.

N. C., Spray—Carolina Cotton & Woolen Mills Co., will erect warehouse; cost \$175,000; 116x216 ft.; 5 stories and basement; reinforced concrete; composition roof; concrete floors; steel sash and trim; wire glass; Leaksville Lumber Co., Contr., Leaksville, N. C.

Tenn., Knoxville—Tobacco Planters' Association will erect brick and steel warehouse; one story; 1310-18 Henrietta Ave.; cost \$41,000; A. B. Bauman & Son, Archts.; Lynn A. Hayes, Contr., both Knoxville.

Tex., Dallas—Terminal Building Corp., H. A. Olmstead, Pres., temporary offices, 1008 S. W. Life Bldg., will erect Santa Fe office and warehouse units, Commerce St., between Kendall and Poydras Sts.; cost \$4,500,000 to \$5,000,000; office building 20 stories; 200,000 sq. ft. of floor space; structural steel and reinforced concrete, finished with brick and terra cotta; copper roof; 4 elevators; 5 arches for entrances and exits; 4 warehouse units; 10 stories each; 1,200,000 sq. ft. of floor space; underground trackage system;loyd R. Whitson and F. Cowderoi Dale, Archts.; Watson Co., Contrs., both Dallas. (Previously noted.)

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Air Compressor.—C. M. Roswell (Mchy. Dealers), 1162 Marlyn Rd., Philadelphia, Pa.—Prices on 250 or 500 cu. ft., maximum pressure 15 or 10 lbs. and lower air compressor; high speed for small space, prefer portable type direct connected, 3 phase, 60 cycle, 220 volt, stationary and belted type will be considered.

Automatic Governor Controls, etc.—Dr. C. E. Carroll, Newport, Ark.—To correspond with manufacturers of automatic governor controls and automatic oilers for electric machinery.

Bank Furniture.—Farmers' Bank & Trust Co., Robt. L. Steele, Pres., Rockingham, N. C.—Bank furniture.

Barrels, etc.—R. L. Perdew, Box 491, Wauchoula, Fla.—To correspond with manufacturers of barrels or kegs.

Baskets.—See Crates and Baskets.

Boiler.—Chestertown Development Co., Chestertown, Md.—Prices on boiler suitable to heat one-story building, 60x140 ft. (locomotive type preferred.)

Boiler.—W. M. Smith & Co. (Mchy. Dealers), Box 1709 Birmingham, Ala.—To purchase 80 h. p. boiler.

Boiler.—R. A. Sonn, Supt., Hebrew Orphans Home, Atlanta, Ga.—Second-hand return tubular boiler, 10 ft. long, diam. of 2 ft. 7 in. and work pressure of 100 lbs.

Boiler, etc.—U. S. Engineer office, Montgomery, Ala.—Bids until Oct. 1 to furnish one steam boiler with fixtures, stack, etc. for U. S. dredge Utopia at Columbus, Ga.

Boilers.—Dr. J. H. Groseclose, 807 Mercantile Bank Bldg., Dallas, Tex.—Boilers for 7-story hospital, 114x160 ft.

Boilers.—Guyan Machine Shops, Logan, W. Va.—Boilers, 35 to 40 h. p. mounted on wheels, 110 lbs. pressure, complete with stack, grates and all fittings.

Borer and Reamer.—See Woodworking Machinery.

Box Plant Machinery.—Nottaway Shook Co., Inc., Blackstone, Va.—To purchase new box plant machinery or complete box plant that might be moved as a whole.

Brick Making Machinery.—J. G. Gault, Whitesburg, Ky.—To purchase machinery to manufacture bricks.

Bricks.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until Sept. 13 to furnish 15,000 common red bricks; delivery Marine Barracks, Quantico, Va.; Sch. 127.

Bridge.—Hemphill County, Canadian, Tex. Details under Construction News—Bridges, Culverts, Viaducts.

Bridge.—Louisiana Highway Comn., Baton Rouge, La., will build 34 culverts and 2 bridges. Details under Construction News—Bridges, Culverts, Viaducts.

Bridge.—Noxubee County, Macon, Miss.—Will build 8 bridges. Details under Construction News—Bridges, Culverts, Viaducts.

Building Material.—Pearl City Building & Association, Emily A. Kelly, Secy., Hopkinsville, Ky.—Building material of all kinds.

Building Material.—E. W. Bailey, Box No. 438, Fernandina, Fla.—Building material for \$30,000 to \$45,000 brick church.

Cables, Pulleys, etc.—Noxubee County Supvrs., Jno. A. Tyson, Clk., Macon, Miss., Bids until Oct. 1 for cables, pulleys, trips, etc.

Cars (Dump.)—D. C. Elphinstone, 408 Continental Bldg., Baltimore, Md.—Twelve

Western 4-yd., two-way 36-in. gauge dump cars, either steel or wood draft beams.

Chemical and Refining Plant Equipment.—John M. Gallalee, care of Gulf States Chemical & Refining Co., 608 American Trust Bldg., Birmingham, Ala.—Bids until Sept. 15 for tanks, pumps, agitators, filter presses, dryers, evaporators, pulverizers, containers.

Clay (Brick Making)—J. G. Gault, Whitesburg, Ky.—To purchase clay for brick making, tested and analyzed.

Clocks.—Farmers' Bank & Trust Co., Robt. L. Steele, Pres., Rockingham, N. C.—Clocks.

Concrete Mixer.—Noxubee County Supvrs., Jno. A. Tyson, Clk., Macon, Miss.—Bids until Oct. 1 for one Treger batch-mixer No. 41.

Containers.—See Chemical and Refining Plant Equipment.

Conveying and Handling Equipment.—G. W. Van Keppler, Atlanta, Ga.—To purchase elevator bucket and tower hopper mounted on steel sliding frame, bucket must be at least 1/4 yd. capacity; Southern delivery.

Conveyors (Drag and Belt Type).—W. L. Duncan, 347 Arcade Bldg., Norfolk, Va.—To correspond with manufacturers of drag and belt type portable conveyors.

Cotton Batting Machinery.—Susman Gin Co., B. L. Susman, Pres., Washington, N. C.—To correspond with manufacturers of machinery to make cotton batting.

Crane (Locomotive).—W. M. Smith & Co. (Mchy. Dealers), Box 1709, Birmingham, Ala.—To purchase locomotive crane.

Crates and Baskets Machinery.—P. B. Smith, care of Seaboard Hotel, Hamlet, N. C.—To correspond with manufacturers of machinery to make peach and vegetable baskets and crates.

Desks.—Farmers' Bank & Trust Co., Robt. L. Steele, Pres., Rockingham, N. C.—Desks.

Dredge.—U. S. Engineer office, 537 S. Dearborn St., Chicago, Ill.—Bids until Nov. 1 to construct, test and deliver one 15-in. pipe line dredge.

Electric Transmission Line.—Town of Bethel, N. C. Details under Construction News—Electric Light and Power Plants.

Evaporators.—See Chemical and Refining Plant Equipment.

Filter Presses.—See Chemical and Refining Plant Equipment.

Gravel.—Louisiana Highway Comn., Raymond Bldg., Baton Rouge, La.—Bids until Sept. 25 to furnish 14,492 cu. yds. sand clay gravel, or 4931 cu. yds. washed gravel and 9861 cu. yds. sand clay gravel to surface 6.111 mi. road; plans, etc., on file; J. M. Fourmy, State Highway Engr.

Generators.—Dr. C. E. Carroll, Newport, Ark.—To purchase generators suitable for a wind electric outfit.

Green Hylo Plate.—McIntosh & Harrington, Contrs., Kingstree, S. C.—Prices on 1300 sq. ft. of green hylo plate, f. o. b. Olanta, S. C.

Hammer (Pile Driver).—Noxubee County Supvrs., Jno. A. Tyson, Clk., Macon, Miss.—Bids until Oct. 1 for 1500 h. p. pile driver hammer.

Hardware, etc.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until Sept. 21 to furnish 300 extra slim taper, single cut, 6-in. files; 300 double end, taper, 8-in. files; 300 mill bastard, 10-in. files; 120 warding bastard 6-in. files; 50 lbs. flake glue; 50 lbs. liquid glue; 30 lbs. escutcheon

brass pins; 6000 stove bolts; 25 gross wire screw eyes; 15 gross wire screw hooks, assorted sizes; 70 lbs. copper rivets and burrs; 300 lbs. poultry netting staples; 1676 gross iron and brass, flat and round head screws, assorted sizes; 18,500 lbs. common wire nails; 3500 lbs. wire finishing nails, etc.; delivery Quantico, Va.; Sch. 128.

Heating Plant.—Board of Education, A. E. Mushrush, Clerk, 400 N. Walnut Ave., Oklahoma City, Okla.—Bids until Sept. 8 for heating Horace Mann and Northeast grade schools; plans and specifications at office Layton-Smith & Forsyth, Archts., 701 S. W. National Bank Bldg., Oklahoma City.

Holst.—Jno. O. Brown, Willow Springs, Mo.—New or second-hand single drum holst.

Holsts (Chain).—Tom Huston Manufacturing Co., Columbus, Ga.—Several used 1/2 and 1-ton chain holsts.

Holsts.—Guyan Machine Shops, Logan, W. Va.—Portable holsts, steam, electric and belt driven.

Hospital Equipment.—Dr. J. H. Groseclose, 807 Mercantile Bank Bldg., Dallas, Tex.—Equipment for hospital.

Ice Plant Machinery.—Lukli Investment Co., Inc., R. F. D. No. 1, Box 316, El Paso, Tex.—Invite bids on ice machinery.

Ice Plant Machinery.—Consolidated Ice & Fuel Co., R. L. McNally, Treas., Union, S. C.—Machinery necessary to convert steam distilled water plant to an electric raw water plant.

Kegs.—See Barrels, etc.

Kitchen Equipment (Dish Washing, etc.)—Dr. J. H. Groseclose, 807 Mercantile Bank Bldg., Dallas, Tex.—Kitchen equipment, including dish washing and other devices.

Lamp Bulbs (Mazda Incandescent).—Union Pacific System, E. E. Adams, Asst. to Pres., Room 802, Union Pacific Bldg., 1416 Dodge St., Omaha, Neb.—Bids until Sept. 15 to furnish for one year, beginning Sept. 15, standard large Mazda incandescent lamp bulbs and miniature Mazda incandescent lamp bulbs, aggregating approximately \$75,000 and \$10,000, net value respectively; information obtained from offices of Oregon Short Line R. R. Co.; Oregon-Washington R. R. and Navigation Co.; Los Angeles and Salt Lake R. R. Co.; St. Joseph and Grand Island R. R. Co.; Chicago office 58 E. Washington St.; New York office, 120 Broadway.

Lathe.—See Woodworking Machinery.

Laundry Machinery.—Dr. J. H. Groseclose, 807 Mercantile Bank Bldg., Dallas, Tex.—Laundry machinery for hospital.

Locomotive.—W. M. Smith & Co. (Mchy. Dealers), Box 1709, Birmingham, Ala.—To purchase standard gauge locomotive.

Lumber, etc.—Treasury Dept., General Supply Committee, Building F, 7th and B Sts., N. W., Washington, D. C.—Bids until Sept. 18 to furnish during the period beginning Oct. 1 and ending Dec. 31, 1923, lumber, mill work, packing boxes and building materials; also to supply for nine months period beginning Oct. 1 to June 30, 1924.

Metal Tags.—City of San Antonio, Tex., Fred Fries, Clk.—Bids until Sept. 17 for 7000 metal bicycle tags; James Simpson, City Purchasing Agent.

Mining Machinery.—Kelleys Ferry Coal Co., W. J. Nixon, Pres., 322 First National Bank Bldg., Chattanooga, Tenn.—General mining machinery.

Mining Machinery.—Stucky International Mining & Milling Co., Lampazos, N. L.,

Mexico—Concentrating and mining machinery for sulphide silver, lead and zinc ores.

Miscellaneous Supplies.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until Sept. 14 to furnish 72 mason and stone cutters hammers; 100 rake handles; 288 plain bearing casters; 96 twist drills; 390 lbs. of Norway welding iron rods; 5000 plain nuts; 3000 cap screws; 34 gross assorted sizes machine bolts; 34 gross washers; 100 ft. steel cable rope; 200 ft. plough, steel wire rope; 288 lumber crayons; 150 coal shovels; melting pot and pouring ladles, etc.; delivery Quantico, Va. Sch. 122.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Sept. 21 to furnish bolts, screws, nuts, files, tacks, staples, steel rivets, drills, taps, dies, reamers, cotters, hinges and hasps, hacksaw blades, engineers' wrenches, pneumatic rivet buster; brass globe valves. Blank forms and information (Circular 2331) on application to offices of Panama Canal; Asst. Purchasing Agts. at Fort Mason, San Francisco, Cal.

Moulder.—Norwood Lumber Co., Forney, N. C.—New or second-hand, 8 or 9-in., prefer 9-in., four side moulder.

Office Furniture.—Milford Bldg. & Loan Assn., Inc., Millard L. Saulsbury, Pres., 1425 Poplar Grove St., Baltimore, Md.—Office furniture.

Oilers (Automatic).—See Automatic Governor Controls, etc.

Paint.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until Sept. 19 to furnish 250 lbs. cardinal red, semi-paste paint; delivery Marine Barracks, Quantico, Ga.; 1200 gal. of white shellac, delivery Marine Corps Storehouse, Snyder Ave., Philadelphia, Pa. Sch. 131.

Paper (Wrapping).—Crozet Pin & Bracket Co., Crozet, Va.—Names and addresses manufacturers of wrapping paper.

Paving.—City of Huntington, W. Va.—Details under Construction News—Road and Street Construction.

Paving.—Town of Mt. Gilead, N. C.—Details under Construction News—Road and Street Construction.

Paving.—Board of Commrs., Leesburg, Fla. Details under Construction News—Road and Street Construction.

Paving.—City of Baltimore, Md. Details under Construction News—Road and Street Construction.

Pecan Grading and Cracking Machinery.—Miss J. Ratliff, Raymond, Miss.—To correspond with manufacturers of machines for grading and cracking pecans.

Planer.—See Sawmill and Planer.

Plumbing.—Board of Education, A. E. Mushrush, Clerk, 400 N. Walnut Ave., Oklahoma City, Okla.—Bids until Sept. 8 for plumbing in Horace Mann and Northeast grade schools; plans and specifications at office Layton-Smith & Forsyth, Architects, 701 S. W. National Bank Bldg., Oklahoma City.

Plumbing and Heating Systems.—Board of Buncombe County Commrs., E. K. Lyda, Chmn., Asheville, N. C.—Bids until Sept. 17 for furnishing labor and material and installing plumbing and heating systems for Prison Barracks near Craggy, N. C.; plans and specifications from L. E. Jarrett, County Draftsman, County Garage Bldg., Asheville.

Press (Wheel).—W. M. Smith & Co., (Mchy. Dealers), Box 1709, Birmingham, Ala.—To purchase wheel press.

Printing Machinery.—Everglades Publishing Co., D. W. McLeod, Mgr., Everglades,

Fla.—Prices on printing machinery for newspaper.

Pulleys.—See Cables, Pulleys, etc.

Pulverizers.—See Chemical and Refining Plant Equipment.

Pumping Station and Equipment.—Sandy Creek Drainage Dist., Foley Mo.—Details under Construction News—Drainage and Irrigation.

Pumps.—See Chemical and Refining Plant Equipment.

Rails.—W. M. Smith & Co. (Mchy. Dealers), Box 1709, Birmingham, Ala.—To purchase relay rails.

Road.—Hill County, Hillsboro, Tex., will build 2 roads. Details under Construction News—Road and Street Construction.

Road.—Louisiana Highway Comn., Baton Rouge, La. Details under Construction News—Road and Street Construction.

Road.—State Highway Comn., Raleigh, N. C. Details under Construction News—Road and Street Construction.

Road.—Titus County, Mt. Pleasant, Tex., will improve 2 roads. Details under Construction News—Road and Street Construction.

Road.—Louisiana Highway Comn., Baton Rouge, La.—Details under Construction News—Road and Street Construction.

Road.—State Roads Comn., Baltimore, Md.—Details under Construction News—Road and Street Construction.

Road.—Comms. of Road Improvement, Dist. No. 12, St. Francis County, Forrest City, Ark. Details under Construction News—Road and Street Construction.

Road.—Palm Beach County Commrs., West Palm Beach, Fla., will build 6 roads. Details under Construction News—Road and Street Construction.

Road.—Potter County, Amarillo, Tex. Details under Construction News—Road and Street Construction.

Road.—State Highway Comn., Frankfort, Ky.—Details under Construction News—Road and Street Construction.

Road Oiling Equipment.—H. C. Green, Engr., Fort Pierce, Fla.—Road oiling equipment for 7.12 mi. road.

Roll-Roofing.—Adolphus Tischer & Co., Tejadillo 44, Havana, Cuba—Prices on roll-roofing, with view to representation.

Rubber Products.—Richard F. Giersch, Jr., Engr., Sanford, N. C.—To contract for the manufacture of rubber goods, made to order, in form of a 4-in. diam. metal tube covered with 3-8-in. of rubber, upon the surface are raised cups similar to those on automobile tires of the vacuum type.

Saw (Hub Block-cut).—See Woodworking Machinery.

Sawmill and Planer.—J. J. Akers, Glade Spring, Va.—To purchase second-hand sawmill and planer to attach to water power.

Scale (Platform).—Board of Awards, Howard W. Jackson, Pres., Baltimore, Md.—Bids until Sept. 11 to furnish and erect 20-ton platform scale; Contract No. 72, Water Dept., Walter M. Megraw, Water Engr.

Sewer.—City of Bluefield, W. Va.—Details under Construction News—Sewer Construction.

Sewer.—City of Leesburg, Fla.—Details under Construction News—Sewer Construction.

Sewer Construction.—City of Baltimore, Md. Details under Construction News—Sewer Construction.

Sewer.—City of Miami, Fla. Details under Construction News—Sewer Construction.

Sewers.—City of Roxboro, N. C. Details

under Construction News—Sewer Construction.

Shingle (Tin and Galvanized Iron) Machinery.—J. M. Torrence, 170 Trinity Ave., Atlanta, Ga., to purchase equipment for making tin and galvanized iron shingles.

Shirt Making Machinery.—Latin American Trading Co., Inc., Box 2176, Havana, Cuba.—To correspond with manufacturers of machinery for shirt factory.

Shovel (Steam).—Mills Contractors Equipment Co., Chattanooga, Tenn.—To purchase ½-yd. steam shovel, either traction or crawler type; state price and complete description.

Steel Hull (Dredge).—U. S. Engineer office, Buffalo, N. Y.—Bids until Sept. 21 to construct and deliver new steel hull, house and spuds complete for 4 cu. yds. dipper dredge Sodus.

Steel Tower.—G. W. Van Keppler, Atlanta, Ga.—To purchase steel tower, approximately 80 ft. high, Southern delivery.

Stone Superstructure.—U. S. Engineer's office, Buffalo, N. Y.—Bids until Oct. 3 to construct stone superstructure on breakwater, Dunkirk Harbor, New York.

Tanks.—See Chemical and Refining Plant Equipment.

Towers (Steel).—Ray Brown, Sec., Chamber of Commerce, Newport, Ark.—To correspond with manufacturers of steel towers for windmills.

Tractor.—James Cureton, Austell, Ga.—To purchase tractor to cultivate crops as well as turning the ground; correspond with manufacturers.

Water Wheel.—T. J. Ray, Newland, N. C.—Second-hand water wheel, 900 rpm. horizontal, 150 h. p. under 50 ft. head.

Water Works.—City of Monroe, N. C.—Details under Construction News—Water Works.

Window Blinds.—Leopold Guttentag, Vienna, Austria.—To correspond with manufacturers of window blinds made of wood and wire.

Wire (Galvanized Steel).—Little Rock Barrel & Box Co., 1420 E. 6th St., Little Rock, Ark.—To purchase quantities of 11 gauge galvanized steel wire, could use cut-offs three inches long and up.

Wood Cabinets.—Treasury Dept., Supvrs. Archt's Office, Washington, D. C.—Bids until Sept. 19 to furnish and install wood cabinets, etc. for laboratory in the U. S. Veterans Hospital at Jefferson Barracks, St. Louis, Mo.

Woodworking Machinery.—Thornhill Wagon Co., Lynchburg, Va.—New or second-hand machinery including Defiance hub lathe, hub block-cut saw, hub block borer and reamer.

Financial News

New Financial Corporations

Fla., Miami—Osceola Loan & Savings Assn., capital \$100,000, incorporated with W. J. McEvoy, Pres.; H. J. Gilbert, Secy.

Md., Baltimore—Mutual Loan Assn., capital \$125,000, incorporated by Charles H. Bryant, Lexington Bldg., Ernest E. Hougham, 111 W. Lexington St., and others.

Md., Baltimore—Building and Loan Assn., 4320 Park Heights Ave., capital \$65,000;

incorporated by Louis Bihiy, George E. Pfeiffer and others.

Md., Baltimore—Mutual Finance Corporation of Maryland, capital \$2,000,000; incorporated with Edwin Sonnehill, Pres., 2520 Brookfield Ave.; Alvin Grief, V.-P.-Treas.; Roger B. Williams, Sec., Calvert Bldg.

Md., Baltimore—Equitable Finance & Mortgage Co., 1550 Ridgely St., capital \$10,000, incorporated by Wm. A. Leibowitz, Harry T. Kellam and others.

Md., New Pittsburgh, P. O., Colgate—New Annex Building Corp., chartered by Michael S. Blair, Joseph Wielgosz and others.

Md., White Hall—White Hall Building Assn., capital \$10,000, incorporated by Andrew L. Anderson, J. Ross Wiley and others.

Miss., Gulfport—Commercial Bank & Trust Co., capital \$50,000, incorporated by A. C. Purple, G. H. Clausen, Geo. C. Price and others.

Miss., Jackson—Banker's Bond and Trust Co., Texas Bldg., \$110,000 capital, incorporated with R. E. Kennington, Pres.; H. V. Watkins, V.-P.; W. H. Pullen, V. P.-Gen. Mgr.; A. B. Cook, Sec.-Treas.

Mo., Kansas City—Santa Fe Savings & Loan Assn., capital \$1,000,000, incorporated by J. N. Jackson, J. C. Williams and others.

Mo., New Madrid—New Madrid Abstract & Investment Co., capital \$40,000, incorporated by W. S. Edwards, H. G. Sharp and others.

Mo., St. Louis—Laclede Insurance Agency Co., incorporated by A. F. Felker, A. P. Stocker and others.

N. C., Edenton—King Mutual Life Insurance Co., \$5000 capital, incorporated by T. C. Roberts, S. D. McRae and W. H. Stallings.

N. C., Forest City—Forest City National Bank organized with \$50,000 capital; promoted by J. D. Ledbetter.

Tenn., Memphis—Southern Finance Co., capital \$500,000, incorporated by Percy A. Aden, R. W. Bailey, Jr., and others.

Tex., Farmersville—Collin County Building & Loan Assn., capital \$200,000, organized with W. A. Cannon, Pres.; W. R. Yearly, Sec.-Treas. (Lately noted.)

Tex., Rosenberg—Farmers State Bank organized with \$25,000 capital.

Va., Danville—Danville Mortgage & Loan Co., Inc., capital \$25,000; chartered with John B. Anderson, L. N. Dibrell, A. M. Aiken and others.

Va., Stuart—Virginia Securities Corp., capital \$100,000, incorporated with Bierne Stademan, Pres.; W. M. Stademan, Sec.

New Securities

Ala., Anniston—School Improvement—City, J. L. Wickle, Mayor, receives bids Sept. 13 on \$75,000, 5% bonds; \$1000 denom.

Ala., Birmingham—Public Improvement—H. M. Taylor, City Comptroller, purchased \$26,500 bonds.

Ala., Mobile—Water and Sewer—City voted \$350,000 bonds for water and sewer extension. Address The Mayor. (Lately noted.)

Ark., Lake Village—Road—Lake Route Road Improvement Dist. No. 2, Ed. L. Davis, Sec., will receive bids until Sept. 28 for \$115,000 6% bonds.

Ark., Pine Bluff—Road—Plum Bayou Road

Dist. sold to National Bank of Arkansas, \$240,000, 5½% bonds at \$98.80.

Ark., Pine Bluff—Paving—Mulberry Street Dist. No. 7 sold \$17,000 bonds to Simmons National Bank, Pine Bluff, at 97.50.

Fla., Arcadia—Road—De Soto County sold \$60,000, \$500 denom. 6% bonds to First National Bank of Fort Myers and Bank of Fort Myers.

Fla., Clearwater—Road, Bridge—Pinellas County Commrs., J. N. Brown, Clk., will receive bids until Nov. 1 for \$2,863,000 bonds. (Lately noted.)

Fla., Coconut Grove—School—Coconut Grove Special School Tax Dist. No. 5 will vote on \$25,000 bonds. Address Dist. School Trustees.

Fla., Jacksonville—Road and Bridge—Duval County, Frank Brown, Clk., will receive bids until Oct. 3 for \$1,050,000 road and \$450,000 bridge 5%, \$1000 denom. bonds.

Fla., Jacksonville—Public Improvements—City contemplates voting on \$350,000 bonds for water, sewer, lights and streets. Address The Mayor.

Fla., Key West—Road—Monroe County Commrs. contemplate voting in Sept. on bonds.

Fla., Orlando—Auditorium, Fire Station, etc.—City defeated \$525,000 utilities bonds and \$100,000 bonds to erect fire station, auditorium and bathing pavilion. Address The Mayor. (Lately noted.)

Fla., Pahokee—Paving, Lighting, Ice Plant—Town, D. S. Spooner, Pres., Town Council, will vote Sept. 28 on \$100,000 bonds. (Lately noted.)

Fla., Perrine—School—Perrine Special School Tax Dist. No. 12 sold \$8000 bonds to Bank of Bay Biscayne, Miami, at \$8100.

Fla., Sarasota—Schools—City sold \$100,000 5% bonds to C. W. McNear & Co., Chicago, Ill., and \$175,000 6% bonds to First National Co., Sarasota.

Fla., Sebring—Road—Highlands County, Avon Park Township, contemplates \$50,000 bond issue. Address County Commrs.

Fla., Tampa—School—Hillsborough County Special Tax School Dist. No. 10 sold \$6000 6% bonds to Exchange National Bank.

Fla., West Palm Beach—Improvement—City, Geo. L. Wright, Mgr., will receive bids until Sept. 18 for \$145,000 bonds.

Ga., Atlanta—Park—City defeated \$2,000,000 bonds. Address The Mayor. (Lately noted.)

Ga., Columbus—School, Playground, Park, Sewer and Fire Stations—City, J. Homer Dimon, Mayor, postponed election on \$900,000 bonds, including \$450,000 for schools, etc. (Lately noted.)

Ga., Hilltonia—School—Town voted \$4000 bonds. Address The Mayor.

Ga., Sylvania—School—Sylvania School Dist. will vote on \$40,000 bonds. Address Dist. School Trustees.

Ga., Tybee—Paving—Town sold \$110,000 bonds to Dixon Contracting Co.

Ky., Calhoun—Road—McLean County sold \$210,000 of \$350,000 bond issue recently voted, to Seasingood, Meyer & Co., Cincinnati, O.

Ky., Owensboro—Water—City will vote in November on issuance of \$100,000 water extension bonds. Address The Mayor.

La., Bossier City—Water and Sewer—City voted \$125,000 bonds. Address The Mayor. (Lately noted.)

La., Colfax—School—School Board, Grant Parish School Dist. No. 1, J. H. McNeely, Pres., will receive bids until Sept. 22 for \$42,500 5% bonds.

La., Crowley—Water, Sewer, Fire Fighting

Equipment—City sold \$200,000 bonds to Sidney Spitzer & Co., Toledo, O., at premium of \$9855; Philip S. Pogle, Jr., Mayor. (Lately noted.)

La., Lafayette—Courthouse and Roads—Lafayette Parish will vote Sept. 18 on \$400,000 bonds including \$265,000 to build courthouse and \$135,000 for roads; W. A. Montgomery, Pres., Police Jury.

La., Mandeville—City contemplates voting \$25,000 bonds for the opening of Bayou Castaigne. Address The Mayor.

La., Mandeville—City sold \$32,000 improvement bonds to Commercial Bank & Trust Co., of Covington, La.

La., Marksville—School—Avoijelles Parish School Board, Foster Couvillon, Pres., sold \$150,000 6% bonds to Marine Bank & Trust Co., New Orleans. (Lately noted.)

La., Oak Grove—School—West Carroll Parish School Board, W. A. Jackson, Pres., will receive bids until Sept. 25 for \$36,000 bonds for Epps School Dist. No. 1. (Lately noted.)

La., Port Allen—Drainage—West Baton Rouge Parish, Commrs. of Choctaw Basin Drainage Dist. voted \$104,000 bonds.

La., Welsh—Light Plant, etc.—City, Jno. W. Armstrong, Mayor, votes Sept. 17 on \$20,000 bonds for purchasing engine and enlarging light plant.

Md., Port Deposit—General Purpose—City sold \$8000 5% coupon bonds to Stein Bros. & Boyce, Baltimore. (Lately noted.)

Miss., Jackson—Bridge, Paving—Hinds County Board of Supvrs. contemplates \$240,000 bond issue.

Miss., Jackson—General Purposes—Hinds County Board of Supervisors, Lamar Puryear, Pres., will issue \$50,000 6% negotiable notes.

Miss., Yazoo City—Drainage—Oden Drainage Dist. sold \$50,000 bonds to Clark & Hunt Co.

Mo., Caruthersville—Road—Bragg City Special Road Dist., voted \$50,000 bonds. Address County Commrs.

Mo., Edina—Waterworks and Sewer—City, W. A. Kelly, Clk., sold \$120,000 bonds to Union Trust Co., East St. Louis, Ill. (Lately noted.)

Mo., Excelsior Springs—Paving—City sold \$20,000 bonds to Guarantee Trust Co., Kansas City, Mo.

Mo., Holden—Water—City receives bids Sept. 25 on \$68,000 bonds. Address The Mayor.

Mo., Hunnewell—School—Hunnewell School Dist. defeated \$20,000 bonds. Address School Dist. Trustees. (Lately noted.)

Mo., Republic—Electric—City voted \$35,000 bonds for electric light plant. Address The Mayor. (Lately noted.)

Mo., Washburn—School—Washburn School Dist. voted \$10,000 bonds. Address Dist. School Trustees.

N. C., Bryson City—Road—Swain County, Nantahala Township, will vote Sept. 15 on \$20,000 bonds. Address County Commrs.

N. C., Gastonia—Street Improvement—City, B. H. Parker, Mayor, plans to issue \$250,000 bonds. Address The Mayor.

N. C., Hillsboro—School—Orange County Commrs. will receive bids until Sept. 17 for \$65,000, \$1000 denom. bonds.

N. C., Monroe—Funding—Union County Commrs. will receive bids until Sept. 24 on \$45,000 bonds.

N. C., Shelby—Street—Town, D. C. Lackey, Mayor, sold \$35,000 bonds to Title Guaranty and Trust Co., Cincinnati, O., at premium of \$406. (Lately noted.)

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

N. C., Weldon—Improvement—Town, E. L. Haywood, Clk., sold \$36,000 6% bonds to C. W. McNear & Co. at premium of \$817. (Lately noted.)

N. C., Wilkesboro—School—Wilkes County sold \$80,000 5½% coupon school funding bonds to Sidney Spitzer & Co., Toledo, O., at 101.73.

Okla., Albion—School—Albion Consolidated School Dist. No. 2 voted \$15,000 bonds; Sloan King, Pushmataha Co. Supt., Antlers.

Okla., Sapulpa—Paving—Creek County Comms., Tiger Township, voted \$300,000 bonds.

S. C., Aiken—School—City sold \$25,000 bonds to Citizens and Southern Bank, Augusta, Ga.

S. C., Lane—School—Lane School Dist. sold \$15,000 6% bonds to J. H. Hilsman & Co., Atlanta; \$1000 denom.

S. C., Laurens—Road and Bridge—Laurens County Highway Comm. sold \$250,000 5% bonds to Bank of Charleston, Charleston, S. C., at 98.50. (Lately noted.)

S. C., Spartanburg—Sewer and Street—City will vote Sept. 25 on \$60,000 sewer bonds and \$400,000 street improvement bonds. Address The Mayor.

S. C., Sumter—Road—Sumter County Road Comsn. sold \$500,000 bonds to Lowry Bank & Trust Co., Atlanta, Ga., at 98.14.

S. C., Walterboro—School—Walterboro School Dist. sold \$59,000 6% bonds to Sidney Spitzer & Co., Toledo, O., at 104.02. (Lately noted.)

S. C., York—Roads—York County will vote Oct. 23 on \$2,000,000 bonds. Address County Comms.

Tenn., Athens—Paving—City sold \$129,000 street improvement bonds to I. B. Tigrett & Co., Jackson, Tenn.

Tenn., Cleveland—Indebtedness and School—City sold \$45,000 bonds for indebtedness and \$75,000 school building bonds to Caldwell & Co., Nashville, and I. B. Tigrett Co., Jackson, Tenn.

Tenn., Cookeville—Water and Sewer—City votes Sept. 29 on \$100,000 bonds. Address The Mayor.

Tenn., Knoxville—A. C. Allyn & Co., Chicago, purchased \$1,250,000 6% coupon bonds.

Tenn., Union City—Water and Sewer—City will vote Sept. 25 on \$125,000 bonds. Address The Mayor.

Tex., Abilene—Road—Taylor County contemplates \$350,000 bond issue. Address County Comms.

Tex., Athens—Road—Henderson County Road Dist. No. 10 will vote Sept. 22 on \$40,000 bonds. Address Henderson County Road Comms., Dist. No. 10.

Tex., Athens—Hospital—Henderson County defeated \$100,000 5% bonds; J. A. Johnson, County Judge. (Lately noted.)

Tex., Coleman—Schools—Coleman County School Dist. No. 4 will vote Sept. 22 on \$200,000 bonds. Address Dist. School Trustees.

Tex., Frisco—Water—City voted \$40,000 bonds. Address The Mayor.

Tex., Kenedy—Water Works—City, Jno. W. Thames, Mayor, sold \$30,000 bonds to Sutherland, Berry & Co., New Orleans, at premium of \$2335.

Tex., La Grange—Road—Fayette County Comms. Court will vote on \$10,000 bonds.

Tex., Laredo—Road—Webb County voted \$250,000 bonds. Address County Comms.

Tex., Lubbock—Sewers and Paving—City contemplates voting on \$500,000 bonds. Address The Mayor.

Tex., Marshall—Schools—City, H. S. Rice, Sec., will vote Oct. 9 on \$250,000 bonds.

Tex., Marshall—Public Improvements—City will vote Oct. 9 on \$410,000 bonds for public improvements. Address The Mayor.

Tex., Rock Springs—School—Rock Springs Independent School Dist. voted \$45,000 bonds. Address Dist. School Trustees.

Tex., San Angelo—School—City will purchase \$25,000 5% bonds. (Lately noted voted.)

Tex., Sulphur Springs—Road—Hopkins County voted \$160,000 bonds. Address R. E. Bertram, County Judge, Sulphur Springs. (Lately noted.)

Tex., Texarkana—City Hall—City voted \$200,000 bonds. Address The Mayor.

Va., Bluff City—Water—City will probably vote on \$20,000 bonds. Address The Mayor.

Va., Cape Charles—Street—Town voted \$50,000 bonds. Address Mayor Dize. (Lately noted.)

W. Va., Charleston—Road—Kanawha County, Union Dist., contemplates \$150,000 bond issue. Address County Comms.

W. Va., Beckley—Road—Raleigh County Court will vote Oct. 13 on \$390,000 bonds. Address County Comms.

Financial Notes

City Savings and Trust Co., Johnson City, Tenn., increased capital from \$15,000 to \$25,000.

Guarantee Savings & Loan Assn., Woodruff Bldg., Springfield, Mo., increased capital from \$2,000,000 to \$3,000,000; W. L. M. Garrett, Pres.; W. T. Bigbee, V.-P.

Home Mortgage Co., Houston, Tex., increased capital from \$100,000 to \$200,000.

Investment Finance Corp., Dallas, Tex., increased capital from \$500,000 to \$1,000,000.

Rolla Savings and Loan Assn., Rolla Mo., increased capital from \$400,000 to \$600,000.

Sumner County Bank and Trust Co., Gallatin, Tenn., increased capital from \$25,000 to \$100,000.

Virginia-Carolina Joint Stock Land Bank, Elizabeth City, N. C., sold \$1,500,000 5% farm loan bonds to Tucker, Anthony & Co., New York City; Mercantile Trust & Deposit Co., Baltimore; Hambleton & Co., New York City, Baltimore and Washington; Trust Co., Norfolk, Va.; F. E. Nolting & Co., Richmond, Va.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers, or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Auction of Lumber Mill Machinery.

Announcement is made elsewhere in this issue of the auction sale of the entire lumber mill machinery in the plant of the Seaford Planing Mill Co., Seaford, Del., at 10 o'clock A. M. Wednesday September 26. The sale includes engines and boilers, baskets and crate machines, etc. all in perfect working order, it is stated. List can be furnished by Harry V. Tubbs, Selbyville, Del. The auctioneers are the Dixie Realty Co., of Cambridge, Md.

Large Orders for Sugar Machinery.

The John H. Murphy Iron Works, New Orleans, La., have received orders for five return current cane juice heaters with 850 feet heating surface each from Central Aguirre, Porto Rico. This firm is one of the largest manufacturers of sugar making machinery, as well as dealers, and is especially equipped to make sugar machinery complete in all particulars, including vacuum pans, multiple effects, juice heaters, mixers, centrifugals, granulators, clarification tanks and settlers, besides having in their 30 years stock of patterns also patterns for the new Norit re-burning kilns, of which the Works have built several. They have foundry, machine shops, boiler shops, etc., to produce all parts necessary for the machinery of a modern sugar factory and undertake the largest contracts. They have built factories for the past 40 years for plants in Cuba, Porto Rico, Mexico, (east and west coast) Central America, and South America, as well as in Louisiana. The firm carry on hand a considerable stock including triple effects, with pumps; copper vacuum pan, with vacuum pump, and a large line of all kinds of pumps, including large vacuum pumps taken in exchange for larger ones.

District Representatives Appointed.

The Tucker—Parthree Electric Company, 115-119 Hollingsworth St., Baltimore, Md., has been appointed representative in the Baltimore district for the complete line of electric motors, generators, and generating sets manufactured by the B. F. Sturtevant Company, Incorporated, of Hyde Park, Boston Mass. Mr. Tucker is an experienced electrical engineer fully qualified for handling problems in motor and generator application. Service will therefore be extended to users of Sturtevant equipment and a complete stock of standard motors will be maintained within easy reach so that deliveries of motors of moderate sizes can be made immediately. The representatives will also maintain a well equipped repair shop with highly experienced workmen for winding and repairing electrical machinery.

Service School a Great Success.

A large attendance marked the sessions of the "Caterpillar Service School of the North," held at Wausau, Wis., August 13 to 21 inclusive, for the purpose of fully informing owners and operators of the "Caterpillar" tractors manufactured by the Holt Manufacturing Co., of Peoria, Ill., and Stockton, Cal., concerning the care and operation of these machines. The attendance included operators, mechanics, highway commissioners and superintendents, and others, the northern distributors of the company's products co-operating with H. H. ("Jack") Chambers, and his assistants to make the school a success. Encouraged by the success at Wausau the company is hastening plans for other schools to be held in various parts of the country during the fall and winter.

(Continued on page 114)

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.



Kelly Kats are efficient and economical

The ability of Kelly Kats to get traction saves time, gas and oil.

The resiliency of Kelly Kats saves repair bills and lengthens the life of the truck.

The sturdy construction of Kelly Kats enables them to deliver long, economical mileage in spite of severe punishment.

The combination of all these qualities makes Kelly Kats the most efficient and most economical tires for heavy and medium duty trucks.

There are no Caterpillar tires but Kelly Kats

KELLY-SPRINGFIELD TIRE COMPANY

250 West 57th Street, New York, N. Y.

KELLY KATS

THE TIRES WITH NINE LIVES



Engineering Offices Opened.

Charles R. Elam has opened offices at 703 Mutual Building, Richmond, Va., under the name of Virginia Engineering Co., and will handle power plant, water supply and contractors' equipment in addition to general and consulting engineering work. Mr. Elam has for twenty years or more been identified with engineering work in the South and Southwest and is widely known in his profession.

Sale of Factory Plant, Machinery and Tools.

A peremptory auction sale of the real estate, machinery and equipment formerly belonging to the American and British Manufacturing Co., will take place at Bridgeport, Conn., on Monday, Tuesday and Wednesday, October 1, 2 and 3, the sale beginning at 10 o'clock A. M. each day, according to a formal announcement elsewhere in this issue. The real estate includes two and three story factory buildings with a total of about 200,000 feet of floor space, about seven acres of ground, and a railroad siding, all on the water front. The machinery and other equipment comprise more than 900 machine tools and machines such as lathes, milling machines, shapers, screw machines, turret lathes, grinders, gear cutting machines, planers, slab millers, slatters, drills, boring machines, etc. Further particulars will be found in the announcement. Catalogs may be obtained from the auctioneers Samuel T. Freeman & Co., 1519-21 Chestnut St., Philadelphia, Pa.

Electric Solder Pot With Heat Control.

A new electric solder pot with automatic heat control has lately been put on the market by J. D. Wallace & Co., manufacturers of woodworking machinery and machine tools, 1401-17 W. Jackson Boulevard, Chicago, Ill. This invention which is the latest addition to their line of labor saving devices greatly simplifies the problem of heating babbit metal, white metal, wax and other materials that are slow conductors of heat. It is designed to overcome oxidization which may be caused by too much heat. When the solder has been heated to 600 degrees Fahrenheit the automatic control begins to act, preventing both overheating and underheating. The control is by means of a volatile substance, very sensitive to heat, and which makes and breaks the electric current, thus controlling the temperature of the contents of the pot, which holds 15 pounds of metal and this can be heated in from 20 to 25 minutes to 600 degrees. The pot weighs only thirteen pounds and is readily portable.

Portable Truck Cleaner.

A new model "Tuac" truck cleaner is announced by the United Electric Co., of Canton, Ohio. It is a portable cleaner mounted like a hand truck so that it can be readily and easily moved about and, it is stated, several cleaners of this pattern were placed in office buildings, hotels, etc., after months of testing by the company's engineers, and were then subjected to the hardest and most exacting cleaning conditions presented in such buildings. All this work they performed rapidly and thoroughly. The new truck cleaner is mounted on steel disc wheels with rubber tires and its small wheel base permits it to be carried from one floor to another in the smallest of passenger elevators and through narrow doorways and corridors. It is equipped with a light flexible hose so that mouldings, shelves, ceilings, walls etc. may be easily cleansed. This new product will meet the demand for a cleaner of greater capacity than the small portable type for use in private residences and its service, it is stated, is equal to that of a large, stationary air cleaning plant.

New Office at Norfolk.

The Westinghouse Electric & Manufacturing Co., has established at Norfolk, Va., a sub-office of the Baltimore branch office with William Ives in charge thereof.

General Manager and Agents Named.

E. D. Spicer, of Wellsville, J. Y., has resigned as works manager of the Kerr Turbine Co. to become general manager of the Standard Turbine Corporation of Wellsville. The last named company has also appointed H. R. Geiger to be their New York manager with office at 350 Madison Ave., (Borden Building) New York City. Percy E. Wright Engineering Co., 2012 L. C. Smith Building, Seattle, Washington, have been appointed agents for the Standard turbines in that district.

Will Continue In Business Separately.

The partnership of the McCall-Moore Engineering Co., Waco, Tex., which has existed since 1912 has, it is announced, been dissolved by mutual consent of the partners, each of whom will remain in Waco and engage in the same general line of business. They will both probably maintain offices on the third floor of the Amicable Building, Mr. McCall conducting his business under the name of McCall Engineering Co. and Mr. Moore operating under the name of Bart. Moore Construction Co.

District Office Established.

The Triumph Electric Company, manufacturers of the "Triumph" motors, Cincinnati, Ohio, have opened a district office at No. 500 S. Brevard St., Charlotte, N. C., with J. McL. Jones as district manager, who is equipped to extend instant service and to make immediate shipments. Mr. Jones has been intimately connected with the electrical industry in North Carolina and South Carolina for the last twelve or fifteen years through the Southern Utility & Power Co. under James B. Duke.

Now In Their New Plant.

The Allen-Morrison Sign Company, Incorporated, of Lynchburg, Va., have recently completed and occupied their new plant on Rutherford St. The building is of brick and steel and is modern in every particular. It has 24,000 feet of floor space on one floor and sufficient land is held to permit of expansion if necessary. The shape of the building is such that an additional wing can be erected. This firm manufactures a complete line of outdoor advertisement signs ranging from small tacker signs to large bulletin signs. They are also sole manufacturers and owners of two patented and novel signs known as the "Wind Motor Sign" and the "Hutson Rotating Sign," which are made in several sizes.

Fire Brick for Oil Furnaces.

As a result of a long series of experiments which the Savage Mountain Fire Brick Co., of Frostburg, Md., conducted in connection with Raymond M. Howe, Senior Fellow of the Refractories Manufacturing Association Fellowship, at the Mellon Institute of Industrial Research, Pittsburgh, Pa., the company has, it is announced, perfected a high grade hand made fire brick which will give maximum service in oil fired heating furnaces. This, it is stated is a much denser brick than the brick formerly used and it will expand and contract without spalling. It will stand a heat of approximately 3300 degrees Fahrenheit and will show a negligible amount of expansion or contraction. It is named "S. M. Extra" and in its manufacture it goes through double grinding and double tempering.

Exhibits at Two Expositions.

The exhibit of the Morse Chain Company, manufacturers of Morse chain drives, Ithaca, N. Y., at the Ninth National Exposition of Chemical Industry, Grand Central Palace, New York City, September 17-22, will be found at Spaces 539 and 540 where a full line of chain samples will be displayed and representatives of the company qualified to give engineering advice on transmission problems will be present. A prominent feature of the exhibit will be a Balopticon, manufactured by the Bausch & Lomb Optical Co., of Rochester, N. Y., which will display on a screen a series of Morse chain drives as used everywhere in chemical industries. Other generally interesting views will also be shown. The Morse Chain Company will also have an exhibit at the American Mining Congress Exposition, Milwaukee, Wis., during the week of September 24, their location being at Space 117, where a like display of their products will also be made, and with engineering representatives in attendance.

Book Reviews.**Cycles of Unemployment in the United States.**

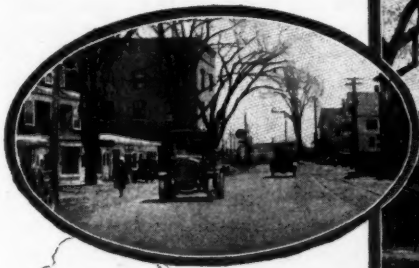
By William A. Berridge, Ph.D. Boston and New York: Houghton Mifflin Company. 1923. Pp. 90. \$1.25.

This book is a worthy contribution to the stock of general knowledge concerning what is one of our important social economic problems. It contains answers to such queries as these: Exactly how has the volume of unemployment fluctuated during the last two decades in the United States? Exactly what relations have prevailed between employment and production? How reliable is an index of unemployment as a forecaster of business conditions? These are among the practical questions answered by Dr. Berridge by means of comprehensive and new statistics carefully considered and digested. This study, the publishers state, was given the first prize in the contest conducted by the Pollak Foundation for Economic Research, the judges being Wallace B. Donham, Irving Fisher and Wesley C. Mitchell. The publication is No. 4 of the Pollak series.

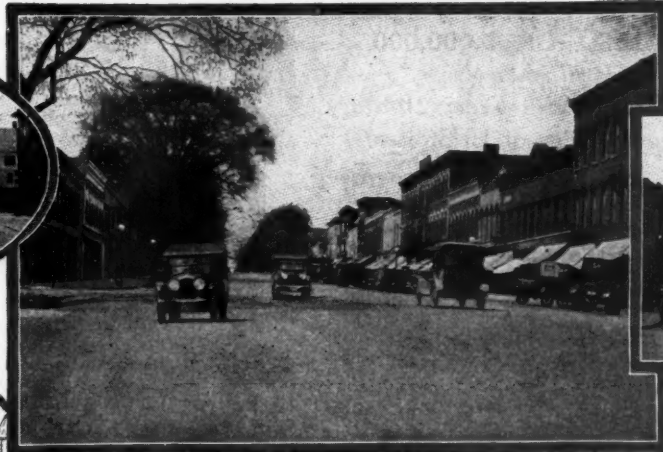
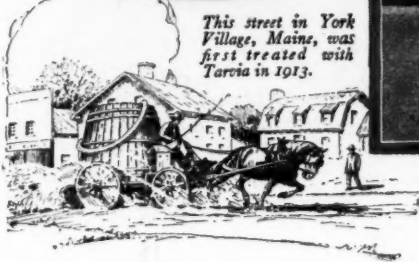
Publicity. By R. H. Wilder and K. L. Buell.

New York: The Ronald Press Company. 1923. Pp. 271. \$2.75.

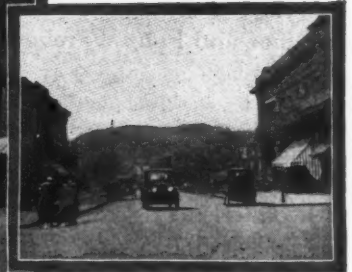
This volume, which is described on its title page as a manual for the use of business, civic or social service organizations, is the work of men who have been active for years in publicity development and are therefore fully equipped to make authoritative presentation of their subject. Therefore, the book will be of value to anyone desiring to mold public opinion as a business asset or otherwise; it will enable one to get a new viewpoint that is worth while and, moreover, it is stated that it answers all questions which were actually asked by forty-three separate organizations. It is concisely arranged and entertainingly written. Considered only as a discussion of the matter of salesmanship, for instance, it will be found valuable to any business man as it deals with the subject in a new way and gives many practical suggestions, showing how lessons learned in some political campaigns and great charitable movements may be applied to commercial and financial business, besides demonstrating how the methods of salesmanship and advertising can be adopted in connection with social or civic organizations. The volume is finely printed and is bound in blue cloth with lettering in gold.



This street in York Village, Maine, was first treated with Tarvia in 1913.



A macadam road brought up to date. Main Street, Le Roy, New York—transformed by Tarvia during 1919 and 1920.



Columbia Avenue in Vandergrift, Pa., once an old brick street, was surfaced with Tarvia in 1914. Other streets are being improved in the same manner.

The Three Ages of Main Street—

What are the three ages of America's Main Streets? First, the Age of Mud and Dust—the age of the sprinkling cart—the age when thaws turned Main Street into a mud-hole.

Next, the Age of Incompleteness. In this period, a few blocks of Main Street were given a fine, expensive pavement. Then came an abrupt break-off into unimproved country roads.

And today—the Age of Tarvia.

Main Street has been extended. Instead of short stretches of ultra-expensive pavement, the public now demands the greatest possible mileage of good roads that the available funds will permit.

To meet this demand, experienced road officials are constructing moderate priced, low maintenance Tarvia Roads. Moreover with Tarvia they are transforming worn-out macadam at small expense into modern "all-year" highways.

Tarvia roads are not only firm, smooth, dustless and mudless all the year round, they are far less costly to build and maintain than any other type of modern highway. There is a grade of Tarvia for every road purpose—new construction, reconstruction, repairs, and maintenance.

Write to our nearest office for helpful information.



Motorists in Leavenworth, Kansas, find it smooth, easy riding as they spin down Broadway—a Tarvia "Main Street" since 1917.

Tarvia

*For Road Construction
Repair and Maintenance*

The *Barrett* Company

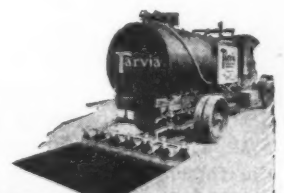
New York
St. Louis
Detroit
Minneapolis
Youngstown
Baltimore

Chicago
Cleveland
Kansas City
Salt Lake City
Milwaukee
Syracuse

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Birmingham
Bethlehem
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Columbus
Rochester

THE BARRETT COMPANY, Limited:
Montreal Toronto Winnipeg Vancouver St. John, N. B. Halifax, N. S.



State Street, Hart, Michigan, first treated with Tarvia in 1913.

CONTRACT AWARDED FOR 5,000,000 SANTA FE TERMINAL.

**Terminal Building Corporation Will Erect 20-Story
Office and Four Warehouse Units of 10 Stories.**

Dallas, Tex., September 11.—[Special.]—Contract has been awarded by the Terminal Building Corporation of this city, H. A. Olmstead, President, for the erection of the \$5,000,000 Santa Fe building to be erected here on Commerce street, between Kendall and Poydras streets. This project will include a 20-story office section, containing 200,000 square feet of floor space, and four warehouse units of 10 stories each, containing 1,200,000 square feet.

The buildings will be of structural steel and reinforced concrete, finished with brick and terra cotta, the office section to have copper roof. Four elevators will be installed in this section, which will have five arches for entrances and exits. An underground trackage system will serve the warehouses.

Lloyd R. Whitson and F. Cowderoi Dale, both of Dallas, are the architects, while the Watson Company, Dallas, is the general contractor.

Pennsylvania Water and Power Company Plans \$50,- 000,000 Bond Issue.

Stockholders of the Pennsylvania Water & Power Co., of which Charles E. F. Clarke of New York is president, will meet October 30 to authorize a bond issue of \$50,000,000 secured by a mortgage on the company's properties. The purpose is to provide for refunding first mortgage bonds now outstanding to the amount of \$11,878,000 and for future extensions and additions.

The plant of the Pennsylvania Water & Power Co. is located at Holtwood, Pa., near the Maryland line, its present capacity being 115,000 horse power. Two additional units are being installed which will increase the capacity to 140,000 horse power. The company supplies power to the United Railways & Electric Co. and the Consolidated Gas, Electric Light & Power Co., both of Baltimore. J. E. Aldred of New York is the chairman of the board of the Pennsylvania Water & Power Co.

New Gas Corporation to Increase Capital—Has Franchise for Mains in North Birmingham.

Birmingham, Ala., September 8.—[Special.]—The Industrial Gas Corporation, recently organized here with Brewer Dixon as president, will shortly increase its capitalization. The city commission of Birmingham has granted a franchise to the company to lay gas mains to the plant of the American Cast Iron Pipe Co. in North Birmingham. Other industries in North Birmingham and East Birmingham are also negotiating for the use of its gas. It has contracted to take the by-product coke oven gas of the Alabama By-Products Corporation at Tarrant City, that plant having upward of 8,000,000 cubic feet of gas to offer daily.

Exclusion of Water from Oil Wells.

M. J. Kirwan, petroleum engineer of the Department of the Interior, attached to the Bartlesville, Okla., experiment station of the Bureau of Mines, is continuing laboratory experiments on the use of mud fluid and cement in excluding water from oil wells. Data regarding the viscosities and rate of settling have been secured on about fifty samples of mud fluid and a number of tests have been made to determine the penetration of mud fluid of different gravities into unconsolidated sands. Laboratory tests have been started to determine the rate of settling of mud fluid when various electrolytes are added and the effect of gas agitation on mud fluid is being studied. Data are being secured on the tensile and compression strength of cement mixed with various

amounts of water. Tests also are being made to determine the volume of set cement when different proportions of water are used. The amounts of water used in these tests are varied in accordance with the field practices of different oil operators.

Another Georgia County Turns to Tobacco.

Sparta, Ga., Sept. 6.—[Special.]—Hancock County, Ga., may develop into one of the leading tobacco-growing sections of the state, if plans being made by the Hancock Land Company here materialize.

A number of farmers from the tobacco growing section of North Carolina have settled in the county, and declare that the soils are well suited for raising high-grade leaf tobacco. With these as a nucleus around which to build, the Hancock Land Company will organize a "Tobacco Club" among the farmers of the section, secure an expert from North Carolina to spend part time in the county, and start raising tobacco in earnest.

Local bankers and business men have given their hearty support to the plan, a number of farmers have signified their willingness to co-operate, and the club will be pushed vigorously. Before planting time next year, it is thought, a large number of Hancock farmers will be signed up in the club.

Tobacco is rapidly becoming a money crop in those counties of Georgia suited to its growth, and with the aid of the tobacco club proposed, Hancock is expected shortly to be added to the growing list of tobacco counties in Georgia.

World's Wealth and Public Investments.

The unsettled financial situation in so many countries, and the consequent anxiety which is felt by American holders of foreign securities, make the publication of the 1923 edition of "Moody's Rating Book of Government and Municipal Investments" quite timely. Purchasers of this volume are provided with a knowledge of recent foreign financial and economic conditions at least up to the time of its publication. They will find Moody's investment ratings a guide to the safety and security of something like 10,000 foreign government, provincial and municipal bonds, both external and internal issues. All the information, it is said, has been derived from official sources. The book is published by Moody's Investors Service, New York City, and sells for \$20 a copy.

Plans Highway Through Unicoi Gap.

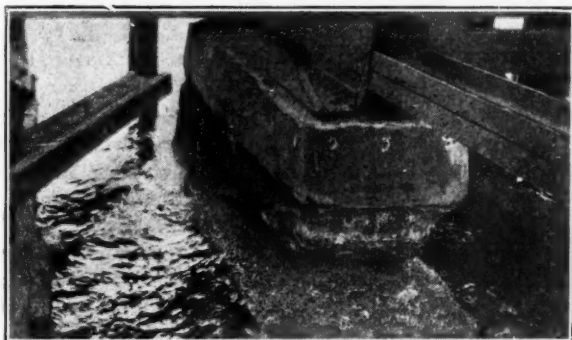
Hiawassee, Ga., September 8.—[Special.]—At a meeting of the Nacoochee-Hiawassee Scenic Highway Association, held here recently steps were taken for a highway through Unicoi Gap—the key point in the Nacoochee-Hiawassee scheme for mountain roads.

Unicoi is the lowest gap in the Blue Ridge range, being 979 feet lower than Frogtown Gap, where the Atlanta-Asheville highway, now under construction, will cross the range into North Carolina. When it is completed a wide section of North Georgia, hitherto inaccessible to tourists, will be opened up.

A committee was appointed, consisting of W. R. Neel, Georgia State Highway engineer, E. N. England, of Towns county, and W. W. Allison, of White county, to make necessary arrangements and push work on the road across the gap.

Plum Bayou Road District, Pine Bluff, Ark., Jesse R. Core and others, commissioners, have awarded contract at \$126,766 to Bradley, Carr & Gwin, of Sheridan, Ark., to build a gravel road of 20.6 miles from Sherrill to Ferriday, with several branches. There will also be four steel bridges—one of 100 feet to span Plum Bayou and three of 40 feet each over the Waterloo Canal.

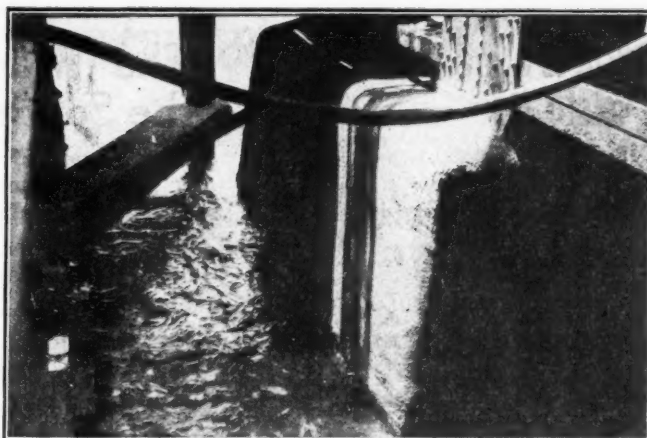
Gunite Work We Have Done



Concrete Pier
Virginian Ry. Coal Dock
Norfolk, Va.
prior to "Gunite"
showing injurious action
of seawater on concrete.



Upper—Making Repairs
on Pier.



Left—Completed Pier
after Gunite Repairs.

The following are examples of Gunite Construction successfully executed by us:

Building Water Reservoirs.
Relining Reservoirs.
Waterproofing Tanks and other Structures.
Restoring disintegrated Brick, Masonry and Concrete Structures.
Steel Bridge Encasement.
Fireproofing Steel Structures.
Building Walls and Roofs.
Stuccoing, Tile, Brick, etc.

Constructing Industrial Buildings.
Lining Coal and Ash Hoppers.
Lining Mine Shafts.
Lining Sewers.
Lining Tunnels.
Holding Rock Cuts.
Waterproofing Dams and Reservoirs.
Building Retaining Walls.
Building Reservoir Division Walls.
Lining Canals and Ditches.

Gunite has twice the strength of good concrete, is extremely dense, waterproof, fireproof and permanent and is economical in application.

General Contracts involving Gunite Construction taken anywhere.
Estimates and Bids promptly furnished.

We especially desire Southern Contracts for Winter Work

CEMENT-GUN CONTRACTING CO.

Specialists in Gunite Construction

ALLENTOWN, PENNA.

Fulton Bldg., PITTSBURGH
218 Wallace Bldg., SALISBURY, N. C.

Chamber of Commerce Bldg., CHICAGO

30 Church St., NEW YORK CITY
1806 Farragut St., LAREDO, TEXAS.

In replying please refer to the Manufacturers Record

Pimento Peppers as a Cash Crop.

Atlanta, Ga., September 7—[Special.]—Pimento peppers will net farmers in Butts County, Ga., approximately \$100,000 this season, it is estimated, and many farmers in the section claim that the pimento is the best substitute yet found for cotton.

The pimento crop is unusually fine this season, having been favored by weather conditions, and several cars have already been shipped from the county to canneries in Macon and other points in the state.

Daily shipments are expected to start within a few days, and will continue until the entire crop has been disposed of. The peppers are scorched, to remove the tough outer skin, and are then put up whole, cut up, or made into catsup and preserve combinations by the firms engaged in canning them.

One plant—the Continental Packing Corporation, at Macon, Ga.—has 1000 acres of pimento peppers under contract, and

several other plants in the state have almost as large an acreage contracted for.

Altogether, the pimento pepper is becoming more and more a cash crop in Georgia as farmers learn how to grow it and manufacturers learn how to preserve it and dispose of it to the general public.

The State Highway Commission, Frankfort, Ky., will receive bids until September 26 for the improvement of 6.502 miles of the Mount Sterling-Owingsville road in Montgomery County. The work will consist of shaping the road, constructing necessary drainage structures and surfacing to a width of 18 feet with rock asphalt on a napped limestone base, a concrete base or reinforced concrete base. Specifications and information may be obtained from the office of the State Highway Engineer at Frankfort.

TIMBERS - FACTORY FLOORING CEILING - SIDING SHIPLAP - ROOFERS

2 x 4 - 2 x 6 - 2 x 8 - 2 x 10 - 2 x 12
OAK and MAPLE FLOORING

KIRKPATRICK LUMBER & TIMBER CORP.

BIRMINGHAM, ALA.

High Grades

Prompt Shipments

The Magnitude of the South's Business

The growth of the South is attracting the attention of the business world as never before.

Is your business expanding? Do you need increased banking facilities?

We invite correspondence.

BALTIMORE COMMERCIAL BANK

GWYNN CROWTHER, President

Pratt Street and Market Place, Baltimore, Md.

Capital and Surplus \$900,000.00

Member Federal Reserve System

IN RICHMOND VIRGINIA

The First National Bank offers complete facilities for quick collections in this territory.

FIRST NATIONAL BANK

JOHN M. MILLER, JR.,
President

Resources over \$30,000,000
Capital and Surplus \$4,000,000

MARYLAND TRUST COMPANY

BALTIMORE

Transacts a General Trust and Banking Business

Correspondence and interviews invited

CAPITAL, \$1,000,000

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Auditing, Cost and Accounting Systems,
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Charlotte, N. C.



A SECURITY OF CHARACTER

There are securities and securities—but here is one 22 years old—absolutely safe—capital always available without loss. \$100.00 and up. References—any Bank and Trust Company in Savannah, Ga. Send for Booklet.

G. A. MERCER COMPANY
Investment Bankers Savannah, Ga.

When Buying Securities you Investigate
Their Worth as a Safe Investment.

Why Not Have a Reliable Bank Note
Company Engrave them as an additional safeguard.

SECURITY BANK NOTE CO.

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223-5-7 CHESTNUT ST.

20 BROAD ST.

The Oscar T. Smith Company

Manufacturing Bank Stationers

407-9-11 E. SARATOGA STREET

BALTIMORE, MD.

OSCAR T. SMITH
President

No. 2 of a series of talks on the
means of testing an appraisal

The backbone of an appraisal

The important task of establishing, analyzing, counting and recording the money represented by property demands the same scrupulous honesty as is required of bankers, accountants and others who deal with money in any form.

The very backbone of an appraisal organization must be a keen sense of the moral responsibility which rests upon it. No appraisal deserves your confidence

unless it is backed by an organization of unflinching integrity.

Every American Appraisal is made with the recognition of the fact that we are counting someone's money. American Appraisals come to you endorsed by the owners of over 20,000 properties which we have appraised in the past 28 years. It is our steadfast purpose to continue to merit this confidence.

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JOHN NUVEEN & CO.

First National Bank Building

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We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.

Write us if you have bonds for sale

We Buy Bonds

City, County, School and Road, from
Municipalities and Contractors

WRITE

THE PROVIDENT SAVINGS BANK & TRUST CO.
CINCINNATI OHIO

Attention
Contractors and Municipalities

We Buy
MUNICIPAL BONDS

THE LEWIS S. ROSENSTIEL CO.
Union Trust Building Cincinnati

WE BUY MUNICIPAL BONDS

We are interested in the purchase of
Southern Municipals including road,
school, county, drainage and levee bonds.

M. W. ELKINS & CO.

Southern Trust Bldg.

Little Rock, Ark.

We Buy Bonds

and invite inquiries from municipalities and contractors
We deal in city, county, district, school, road, lighting,
water works and other municipal issues.

A. C. ALLYN & CO.

71 W. Monroe St., Chicago Ill.

NEW YORK MILWAUKEE MINNEAPOLIS BOSTON

NOTICE TO CONTRACTORS

We want to buy bonds issued by cities, towns
counties, school, road or drainage districts that you
may be able to take in exchange for work. Address
us at our nearest office.

W. L. SLAYTON & CO.

New Orleans, La.

Chicago, Ill.

Toledo, Ohio

Glasgow, Mont.

Tampa, Fla.

HAVE YOU BONDS FOR SALE?

WE BUY ALL CLASSES OF MUNICIPAL BONDS,
INCLUDING CITY, COUNTY, SCHOOL,
PAVING, ROAD AND DRAINAGE

The Hanchett Bond Co. Inc.

39 SOUTH LA SALLE ST., CHICAGO

F. WM. KRAFT LAWYER

Specialist in Examination of
Municipal and Corporation Bonds
and Preparation of Proceedings relating thereto

517-520 Harris Trust Bldg.
111 West Monroe St.

CHICAGO, ILL.

PROPOSALS

BOND ISSUES
BUILDINGS
PAVING
GOOD ROADS

Bids close October 4, 1923.

SEALED PROPOSALS will be received at the U. S. Veterans' Bureau, Room No. 791, Arlington Building, Washington, D. C., until noon, October 4, 1923, and then and there publicly opened, for the construction, complete, of Recreation Building, and the Alteration and Addition to Garage for Attendants Quarters at the U. S. Veterans Hospital No. 32, Mt. Alto, Washington, D. C. This work will include excavation and grading, concrete work, stucco, plaster, carpentry, painting and glazing, wrought iron work, plumbing, heating and electric work. Drawings and specifications may be obtained only upon application to the Maintenance and Operation Division, Room No. 791, Arlington Building, Washington, D. C. Deposit with application of a certified check or postal money order for \$20.00, payable to the Treasurer of the United States, is required as security for the safe return of drawings and specifications within ten days after the date of opening proposals. There is on file in the U. S. Veterans' Bureau, Maintenance and Operations Division, Room No. 791, Arlington Building, Washington, D. C., and at the office of the Medical Officer in Charge, U. S. Veterans Hospital No. 32, Mt. Alto, Washington, D. C., a set of the drawings and specifications for inspection. Frank T. Hines, Director, September 5, 1923.

Bids close September 19, 1923.

DEPARTMENT OF INTERIOR, WASHINGTON, D. C., AUGUST 21, 1923. Sealed proposals (in duplicate) will be received at the Department until 2 o'clock p. m., Wednesday, September 19, 1923, for the construction of the Pathological Laboratory, Freedmen's Hospital, Washington, D. C., in accordance with the drawings and specifications, copies of which, with form of proposal, may be had on application to the Department. A certified check payable to the order of the Secretary of the Interior in the sum of \$25 will be required as a guaranty for the safe return of the plans loaned. The right is reserved to reject any or all bids, waive technical defects, accept one part and reject the other, as the interest of the Government may require. Proposals must be securely enveloped, marked "Proposal for Construction of the Pathological Laboratory, Freedmen's Hospital", and addressed to the Secretary of the Interior, Washington, D. C. F. M. GOODWIN, Assistant Secretary.

Bids close September 29, 1923.

SEALED PROPOSALS, will be received at the U. S. Veterans' Bureau, Room No. 790, Arlington Building, Washington, D. C., until noon, September 29, 1923, and then and there publicly opened, for the construction, complete of outside service lines for heating, drainage, hot and cold water supplies and electric current for Recreation Building and four duplex Officers' Quarters under construction at the U. S. Veterans Hospital No. 79, Dawson Springs, Kentucky. Drawings and specifications may be obtained only upon application to the Maintenance and Operation Division, Room No. 790, Arlington Building, Washington, D. C. Deposit with application of a certified check or postal money order for \$10.00, payable to the Treasurer of the United States, is required as security for the safe return of drawings and specifications within ten days after date of opening proposals. Drawings and specifications will be available (for inspection only) at the U. S. Veterans Hospital No. 79, Dawson Springs, Kentucky. FRANK T. HINES, Director, August 31, 1923.

Bids close September 25, 1923.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., September 4, 1923—SEALED PROPOSALS will be opened in this office at 3 p. m., September 25, 1923, for the construction of new doorways and gypsum block partitions, and the installation of pipe railings and wire grille partitions at the U. S. P. H. S. Hospital at Norfolk, Va. (Tanner's Creek Site.) Drawings and specifications may be obtained from the Superintendent of Construction at the site or at this office in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

Bids close September 20, 1923.

U. S. ENGINEER OFFICE, WILMINGTON, N. C., August 22, 1923. Sealed proposals will be received here until 12 M., September 20, 1923, and then opened for removing the wreck of the Schooner JOSEPHINE. Further information on application.

Bids close October 1, 1923.

U. S. Engineer Office, Montgomery, Ala. Sealed proposals will be received here until 11 A. M., October 1, 1923, and then opened, for furnishing one steam boiler, with fixtures, stack, etc., for U. S. Dredge UPATOI, at Columbus, Ga. Further information on application.

Bids close November 1, 1923.

\$2,863,000 Gold Bonds

PINELLAS COUNTY, FLORIDA

Clearwater, Fla.

Sealed bids will be received by the Board of County Commissioners, in care of the undersigned, in Clearwater, Florida, until 10 o'clock, A. M., November 1st, 1923, for \$2,597,000 Pinellas County Highway Bonds, maturing annually July 1, \$43,000 1929, \$60,000 1930 and 1931, \$65,000 1932 and 1933, \$70,000 1934, \$75,000 1935 and 1936, \$80,000 1937, \$85,000 1938, \$90,000 1939, \$95,000 1940, \$100,000 1941 and 1942, \$105,000 1943, \$110,000 1944, \$115,000, 1945, \$120,000 1946, \$125,000 1947, \$130,000 1948, \$135,000 1949, \$140,000 1950, \$150,000 1951, \$155,000 1952, \$165,000 1953 and \$84,000 1954, and \$266,000 Pinellas County Bridge Bonds, \$86,000 of said bonds maturing July 1, 1954 and \$180,000 thereof July 1, 1955.

All bonds dated July 1, 1923; denomination \$1000; principal and semi-annual interest (J and J1), payable in New York City in gold; coupon bonds with privilege of registration as to principal only. Bonds will bear the lowest interest rate (5% 3/4% or 5 1/2%). All bonds awarded upon any "all or none" bid shall bear the same rate.

Legality will be approved by Chester B. Masslich, Esq., New York City, whose approving opinion will be furnished to purchaser without charge.

The bonds are general obligations of the county, payable from an unlimited tax. Authorized by vote of electors; Highway Bonds 2687 for, 423 against; Bridge Bonds 2714 for, 403 against.

Bids are required on forms which will be furnished by the undersigned, and must be enclosed in a sealed envelope marked "Proposal for Bonds" and be accompanied by a certified check for 2% of the face value of bonds bid for, payable to the order of the Clerk of the Board of County Commissioners, and drawn upon a bank or trust company doing business in Florida, or upon a national bank in any place, or a bond running to the Board of County Commissioners and satisfactory to them with sureties, that the bidder will comply with the terms of his bid. Under the law, any bidder whose bid shall be accepted, shall, with his sureties if a bond be given, be liable to the county for all damages on account of the non-performance of the terms of his bid. The bonds will be delivered at place of purchaser's choice on or about December 1st, 1923. The right to reject any or all bids is reserved.

J. N. BROWN,

Clerk, Board of County Commissioners.

\$20,000 6% School Bonds

Glennville, Ga.

We have to offer \$20,000 Midway School District 6% bonds, dated July 1, 1923. Ten thousand due in fifteen years and ten thousand due in thirty years. Interest payable Semi-annually. For full information, Address: C. L. COWART.

Bids close October 2, 1923.

\$75,000 6% Coupon Notes

ST. LUCIE COUNTY, FLORIDA

Fort Pierce, Fla.

Sealed bids will be opened on October 2, 1923, for \$75,000 Six per cent. semi-annual coupon Court House Negotiable Notes of St. Lucie County, Florida. Principal and interest payable to bearer at United States Mortgage & Trust Company, New York City, N. Y. Said notes mature Two notes on September 1 of each of the years 1925, 1926 and 1927; Three notes on September 1 of each of the years 1928 to 1932, inclusive; Four notes on September 1 of each of the years 1933 to 1938 inclusive; Five notes on September 1 of each of the years 1939 to 1944, inclusive.

For further information address P. C. Eldred, Clerk of the Board of County Commissioners, Fort Pierce, Florida.

Bids close September 24, 1923.

Street Paving

Leesburg, Fla.

Sealed proposals on blank forms furnished by the City and addressed to "THE BOARD OF COMMISSIONERS AND CITY MANAGER, LEESBURG, FLORIDA," will be received until 2 P. M., September 24th, 1923, at Leesburg, Fla., for furnishing all material, equipment and labor for doing the following work:

Approximately 60,000 sq. yds., of street paving, with all necessary drainage and curb and gutter, as specified.

Each bid must be accompanied by a certified check or bidders bond, made payable to the City Manager, for not less than Five Thousand (\$5000) dollars.

Plans and specifications may be seen at the office of the City Manager and at the office of the Engineers and Specifications may be obtained from the Engineers.

Full set of plans will be furnished by the Engineers upon payment of Fifteen Dollars to cover cost of printing, etc., of this amount Ten Dollars will be refunded if the plans are returned in good condition on or before the opening of bids.

The right is reserved to reject any or all bids.

W. A. MACKENZIE, Mayor Com'r.

D. E. BIVENS, City Manager.

H. S. JAUDON ENGINEERING CO., Engrs.
Elberton, Georgia.

Bids close September 20, 1923.

Street Improvements

Mt. Gilead, N. C.

Sealed Proposals for the improvement of certain streets in the Town of Mt. Gilead, N. C., will be received by the Mayor and Board of Commissioners of the Town of Mt. Gilead, N. C., at the office of the Mayor until 3 P. M., Thursday, Sept. 20, 1923, at which time and place the bids will be publicly opened and read aloud.

The following is an approximate statement of the work to be done:

17,500 Sq. Yds. of Pavement.

10,000 Lineal Ft. of Curb and Gutter.

3,000 Sq. Yds. Concrete Sidewalk.

The necessary grading, appurtenances and storm sewers.

Information for Bidders, Form of Proposal, Specifications, Contract and Bond may be obtained from the offices of the Consulting Engineer in Winston-Salem, N. C., or at the office of the Mayor at Mt. Gilead, N. C. Copies of the Specifications may be obtained upon receipt of deposit of five (\$5.00) dollars, which will be returned on bona fide bid. All bids must be made upon the regular form furnished.

A properly certified check or Bidder's Bond in the sum of four thousand five hundred (\$4500) dollars, will be required with each bid; checks and Bidder's Bond will be promptly returned upon the award of the Contract to the Successful bidder. A Surety Company's Bond for 50% of the total amount of the contract will be required.

The Board reserves the right to reject any or all bids or to accept any bid it may deem to be for the best interest of the Town.

R. E. HAMLET, Mayor,

L. V. EDWARDS, Consulting Engineer.
Winston-Salem, N. C.

Bids close October 2, 1923.

Mermentau River Bridge

Baton Rouge, La.

Sealed proposals will be received by the LOUISIANA HIGHWAY COMMISSION, at its offices in the Raymond Building, Baton Rouge, Louisiana, up to 12 o'clock noon Tuesday, October 2nd, 1923, at which time and place they will be publicly opened, for the construction of a Highway Bridge and approaches over the Mermentau River at Mermentau, Louisiana, to be known as the Mermentau River Bridge, Federal Aid Project No. 122.

Construction consists of one channel span 320 feet, riveted through trusses, 20 feet clear roadway, 20 feet high above high water elevation and resting on concrete piers 54 feet high on pile foundations. The plans for the Approach Bridging have been prepared for two alternate types.

Alternate "A" consists of a series of 39 foot reinforced concrete deck girder spans resting on reinforced concrete open bents and pile foundations, 7 spans on the east end and 10 spans on west end of bridge:—

Alternate "B" consists of a series of 19 foot creosoted timber spans on creosoted piling, 16 spans on east end and 27 spans on west end of bridge.

The earth embankment approaches and gravel surfacing, on the same, containing approximately 30,000 cubic yards Earth Borrow and 1200 cubic yards gravel surfacing are to be constructed at the same time the bridge is being constructed but under separate contract.

The entire project will be divided into two Sections: Section "A" will be earthwork approaches and Section "B" will be bridge proper. Bids may be submitted on either or both Sections and on either or both types of Approach Bridging.

Information as to the location, character of work, extent and class of material, terms of payment, regulations governing manner of submitting proposals and executing contract, may, on application be obtained at the office of the Louisiana Highway Commission, Raymond Building, Baton Rouge, Louisiana. Plans and specifications may be inspected at the office of the commission in Baton Rouge or will be furnished upon receipt of \$5.00 as payment therefor, not to be refunded.

J. M. FOURMY,

State Highway Engineer.

W. T. PETERMAN, Chairman.
Louisiana Highway Commission.

Bids close September 27, 1923.

Road Construction

OFFICE OF THE STATE ROAD
DEPARTMENT

Tallahassee, Fla., 8/28/23.

Sealed proposals will be received at this office until 12 o'clock noon on the 27th day of September, 1923, for the construction of the following sections of Roads:

Hard Surface (Plain Cement Concrete or Asphaltic Surface Projects) including clearing and grubbing, grading, surface and drainage structures.

Project No.	Road No.	County	Length (miles)
37-A	2	Alachua	0.701
37-C	2	Alachua	3.261
Clearing and grubbing, drainage structures and dredged Embankment.			
37-D	2	Alachua	2.14
Clearing and grubbing and dredged Embankment.			
38-A	1	Escambia	2.30
Clearing and grubbing, grading, drainage structures and 8-inch Rock Base.			
40-A	4	Brevard	16.169
40-D	4	Brevard	6.727
597	4	Volusia	16.280

All work to be done in accordance with plans and Specifications of the State Road Department.

A certified check or bidder's bond made payable to the Chairman of the State Road Department in the sum of five (5%) per cent of the amount bid, must accompany each proposal.

Plans may be examined at this office or at the offices of the Division Engineers, or may be obtained upon application to this office for the sum of \$5.00 each, which amount will be refunded if plans are returned in good condition by a Bona Fide bidder within 10 days after bids have been received.

The right is reserved to reject any or all bids.

H. B. PHILIPS,
Chairman.

J. L. CRESAP,
Acting State Highway Engineer.

Bids close September 20, 1923.

Improvement of Acoustics

Galveston, Texas.

Bids, proposals and specifications are invited by the City of Galveston for the improvement of the acoustics of the auditorium in the City Hall.

Bidders are invited to furnish plans, specifications and details for the work of curing the present defects in the acoustics of this Auditorium.

All bidders in their bids and proposals to describe the method proposed to be followed by them and the nature of the materials used and the bid for the entire work, stating the amount to be charged the City for the entire amount of work and material furnished by them, and the length of time in which said work will be performed.

The successful bidder will be required to execute a bond with a surety company authorized to do business in the State of Texas, as a surety, said bonds to remain in force and effect for one year from the date thereof, and conditioned as a guarantee that the defects in the acoustics of said Auditorium are overcome and remedied by their work and materials. The amount of said bond to be fifty per cent of the contract price.

The City reserves the right to reject any and all bids, plans or specifications and to accept that bid which in the judgment of the Board of Commissioners of the City of Galveston is for the best interests of said City.

Each bidder will be required to accompany his bid with a certified check of \$250 to be held by the City until such successful bidder executes the contract and bond, as herein provided for; in the event of the failure of such successful bidder to enter into such contract said certified check and proceeds thereof to be and become the property of the City as liquidated damages, said check to be made payable to the Secretary of the Board of Commissioners of the City of Galveston.

Bids must be enclosed in a sealed envelope addressed to the Secretary of the Board of Commissioners of the City of Galveston and endorsed on the outside "Bids for repairs of acoustics of the Auditorium."

Bids will be received up and until ten o'clock A. M. Thursday, September 20, 1923, and will be opened by the Board of Commissioners at the first regular or special session thereafter.

By order of the Board of Commissioners of the City of Galveston.

ANNE C. KELLEY,

Secretary of the Board of Commissioners of the City of Galveston.

Bids close September 24, 1923.

Sewers

Leesburg, Fla.

Sealed proposals on blank forms furnished by the City and addressed to "THE BOARD OF COMMISSIONERS AND CITY MANAGER, LEESBURG, FLA." will be received until 2 P. M., September 24th, 1923, at Leesburg, Fla., for furnishing all material, equipment and labor for doing the following work:

Approximately two (2) miles eight (8) inch pipe sewer extensions and one (1) mile four (4) inch house connections.

Each bid must be accompanied by a certified check or bidders bond, made payable to the City Manager, for not less than five hundred (\$500.00) dollars.

Plans and specifications may be seen at the office of the City Manager and at the office of the Engineers and specifications may be obtained from the Engineers.

Full set of plans will be furnished by the Engineers upon payment of five (\$5.00) dollars, to cover cost of printing, etc., half of which will be refunded upon the return of the plans in good condition before the opening of the bids.

The right is reserved to reject any or all bids.

W. A. MACKENZIE, Mayor Com'r.
D. E. BIVENS, City Manager.
H. S. JAUDON ENGINEERING CO., Engrs.
Elberton, Georgia.

Bids close October 9, 1923.

Sewerage System

Roxboro, N. C.

Sealed proposals will be received by the Mayor and Board of Commissioners of the Town of Roxboro, North Carolina, until 2:00 o'clock p. m., Tuesday, October 9, 1923, for the construction of a sewerage system.

The work consists of the construction of approximately seven and one-half miles of sanitary sewers, varying in diameter from six to fifteen inches, together with all manholes, "Y" and "T" branches, and other appurtenances.

Plans will be on file and may be examined at the office of the Mayor at Roxboro, N. C., and at the offices of Spoon & Lewis, Engineers, American Bank Building, Greensboro, N. C., after September 20th, 1923.

After that date Plans, Specifications, Bid and Contract Forms may be secured from the Engineers upon receipt of a deposit of \$10.00, of which \$5.00 will be returned to bona fide bidders upon return of the plans in good condition to the Engineers.

Each bid must be accompanied by a certified check or bidder's bond in the sum of \$2000.00 payable to the Treasurer of the Town of Roxboro.

Proposals will be opened publicly, with the usual rights reserved.

D. W. A. BRADSHAW,
G. W. KANE,

Sewerage Committee.

SPOON & LEWIS, Engineers
Greensboro, N. C.

Bids close October 9, 1923.

Sewer Construction

Bluefield, W. Va.

Sealed proposals for the construction of sewers will be received at the office of the City Manager at the City Hall, Bluefield, West Virginia, until two o'clock P. M., October 9, 1923.

The work includes approximately fourteen (14) miles of pipe and segment block in sizes between six and forty-eight inches inclusive; approximately two (2) miles of reinforced conduit; approximately five hundred (500) manholes; approximately one hundred (100) storm water inlets; approximately one hundred (100) catch basins, and approximately two thousand (2000) feet of ditch widening.

All bids must be on the blank form of proposal furnished by the City, and must be accompanied by a certified check for five per cent (5%) of the amount of the proposal.

The successful bidder must furnish a contract bond for fifty per cent (50%) of the amount of the contract for the faithful performance of the contract.

Copies of the plans, proposals and contract forms may be obtained by prospective bidders at the office of the City Manager.

The City reserves the right to reject any or all bids.

CLARENCE E. RIDLEY,
City Manager.

Bids close October 10, 1923.

Jail

Shelby, N. C.

Sealed proposals will be received by the Board of County Commissioners of Cleveland County at the Court House at Shelby, N. C., at noon on Wednesday, October 10, 1923, for the following contracts:

1. For a county jail building in the city of Shelby, N. C.
2. For cells, window guards and steel doors in said building.
3. For the jail complete, including building and cell work.

Plans and specifications may be seen and estimates made without cost at the following points:

- Office of Wilson & Berryman, Architects, Columbia, S. C.
- Office of Wilson & Berryman, Architects, Gastonia, N. C.
- Office of Wilson & Berryman, Architects, Wilson, N. C.
- Builders Exchange, Columbia, S. C.
- Builders Exchange, Atlanta, Ga.
- Chamber of Commerce, Charlotte, N. C.
- Chamber of Commerce, Greensboro, N. C.
- Chamber of Commerce, Raleigh, N. C.
- Office of County Commissioners, Shelby, N. C.

They may also be obtained on application to Wilson & Berryman, Columbia, S. C., on deposit of \$25.00 as a guarantee that they will be returned in good condition and without expense within five days of the date on which bids are submitted, and that a bona fide bid is made. When these conditions are met the deposit will be refunded, but otherwise it will be retained by the Architects.

Sub-contractors and material men may secure such portions of the plans and specifications as they may desire at current blue print rates.

Each bid must be accompanied by a certified check or bid bond for \$2,000.00 as a guarantee that if accepted, the contractor will enter into a contract and give bond in approved surety company for an amount not less than one third of the contract price.

The right is reserved to reject any or all bids.

A. E. CLINE,
Chairman of County Commissioners.

CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS WATER POWERS, MISCELLANEOUS PROPERTIES

FOR SALE

Iron Pyrite, correspondence by purchasers solicited.

W. M. Crawford, Gastonia, N. C.

IRON MINES, Fluorspar coal, oil leases, for sale or lease, west Kentucky.

W. S. Lowery,
Salem Star Route, Marion, Ky.

GRAVEL PIT

FOR SALE.—Gravel pit; now operating; finest Tishomingo cement gravel; inexhaustible; Tishomingo County, Mississippi. Write W. L. Elledge, Atty. Corinth, Miss.

GRAVEL LAND

WASHED GRAVEL LAND—2240 acres, fronting on trunk line railroad and river in Louisiana. Unlimited supply of gravel. Will sell fee simple or royalty basis, either whole or part of tract. Address No. 6214, care Manufacturers Record, Baltimore, Md.

COAL LANDS AND MINES

FOR SALE OR EXCHANGE—2500 acres unimproved coal land in tracts, \$35 per acre; has several seams; top drift; adjacent railroad, mines, gas and oil. Write J. CAVANAGH, McAlester, Okla.

COAL AND TIMBER LAND

TWO TRACTS of 700 and 800 Acres of Virgin Timber and Coal Land in Knott County, Ky., about six miles from Railroad, consist of white oak, chestnut, hickory and poplar and other miscellaneous timbers will cut over ten thousand feet per acre. No trades considered. Thos. A. White, Middletown, Ohio.

TIMBER AND TIMBER LAND

FOR SALE—High grade red aromatic Tennessee cedar timber, size 8 to 24 inches diameter, long lengths, on 500 acres of land one and a half miles from railroad; estimated to cut one million feet board measure. O. F. JAMES, 612 West 6th Street, Chattanooga, Tenn.

ALL KINDS OF TIMBER and any size of tract. Southern and Western timber. Going Mills, Etc. W. L. English, Americus, Ga.

FARM, FRUIT, AND TRUCK LANDS

FLORIDA

FOR SALE—Choice colonization tracts, timber and farm lands in Northwest Florida at prices from \$5.00 to \$25.00 per acre. Also houses, hotels, apartments, bungalows and lots for sale in the Sunshine City of St. Petersburg, Florida. For particulars address, Jones & Yates Realty Company, 201 Sumner Building, St. Petersburg, Florida.

FLORIDA—Playground of the Rich; Paradise of the poor. The fastest developing State in the Union, and Roger Babson, the great business statistician, says that TAMPA is destined to be the greatest city in the Southeast. Come and be one of us. We have a Home, Grove or Farm for you. Send today for booklet "Largest Orange Tree in the world," and list. Tampa-West Coast Realty Co., (Inc.) Opp. Post Office, "Since before the war," Tampa, Fla.

MISSISSIPPI

FOR SALE—PLANTATION. 2400 acres Northern Mississippi—1500 level, very fertile creek bottom cotton or corn land, 900 wooded pasture, deep well, creek, springs, two large—several small dwellings, cattle, hogs, tools, mules—everything included \$45 acre. Could make the tract 5000 acres 60% level, well drained fertile creek bottom land. Excellent cotton or cattle proposition. F. W. Cole, 118 Madison, Memphis, Tennessee.

RATES AND CONDITIONS

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisement accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c. per line; 300 lines, 26c. per line; 500 lines or more, 25c. per line.

SOUTH CAROLINA

SECLUSIVE BUILDING SITES perfectly drained on deep water. Large acreage in magnollas, live oaks, palmettoes, and Southern pines. Situated on three-mile expanse of water. Excellent health. Pure artesian water. Winter temperature 57.2 degrees. Roses and other flowers bloom in mid-winter. Five miles to railroad station. Excellent neighborhood. Ideal for winter homes. Fishing and hunting. If interested, write

LAKE REALTY COMPANY,
Beaufort, S. C.

BUSINESS OPPORTUNITIES

I SPECIALIZE in industrial, warehouse and business sites at and adjacent to Washington, D. C.

M. B. HARLOW,
Harlow Building, Alexandria, Va. Colorado Building, Washington, D. C.

PROPERTY OWNERS

Subdivision or acreage suitable for sale turned into quick cash at small cost and no trouble to you.

EFF PERRY BUTLER
Belair Court, Atlantic City, N. J.

WANTED to get in touch with individual or firm who will become interested in a going coal mining business in Virginia to the extent of \$40,000. Well situated, good coal and will make money. Address No. 6221, care Manufacturers Record, Balto., Md.

WANTED.—To trade for Light and Ice Machinery and apparatus, \$13,500 second Mortgage on 429 acre farm, 4 years to run at 7% First Mortgage for \$4000. Land easily worth \$32,000. Address Box 604 Shamrock, Okla.

COLLECTIONS

PACIFIC COAST COLLECTIONS
M. Z. FARWELL, INC.
507 Flatiron Building
San Francisco, Cal.

COLLECTIONS
MERRIAM
507 FIFTH AVENUE,
NEW YORK CITY

FINANCIAL

BONDS—Contractors or bankers or individuals holding any kind of county, city or district bonds, and wishing to dispose of them are invited to write full particulars to Bruce Craven, Trinity, N. C.

FINANCIAL

SOUTHERN
MILL STOCKS
BANK STOCKS
BONDS

25 years' experience in this field.
F. C. ABBOTT & CO.,
Charlotte, N. C.

FINANCING. If you need more capital, write us for information. We recently reorganized and financed a million dollar corporation that had the property but had tried in vain for three years to get the capital for development; and we have just managed the sale of one of the biggest industries in the South. We maintain an organization of experts for the preparation and sale of Bonds and Stocks. We also have clients seeking the purchase of large industrial enterprises, such as cotton mills of the better class, hydro-electric plants, big timber tracts, etc. Address, Bruce Craven, Trinity, N. C.

VALUABLE TEXT-BOOKS on the "Money Question"—The most vital question affecting the welfare of the people. The Monetary Educational Bureau, Kellogg Bldg., Washington, D. C.

BRICK PLANT WANTED

WANTED to lease brickyard from owner with option to buy. Give particulars of material fuel, capacity and quantity of raw material. Address No. 6218, care Manufacturers Record, Baltimore, Md.

INDUSTRIES WANTED

"INMAN, S. C., wants industries, large and small. Offer cheap power—healthful climate—good labor conditions. Address Inman Chamber of Commerce, Inman, S. C.

FAYETTE, ALA., wants INDUSTRIES, large or small. Fine location for cotton mill, Tannery, Box and Veneer Factory. Good labor conditions, cheap power, healthy climate, on railroad, in center of cotton and lumber section. Address, Chamber of Commerce.

ALTAVISTA, VIRGINIA

A live town.
Two railroads, Virginia City basic freight rate.

Free manufacturing sites.
Staunton River passes through the town.
We invite you to look us over.
CHAMBER OF COMMERCE

INDUSTRIES WANTED. Trinity, N. C., near High Point, is fine location for upholstering or other small plants, which we will help finance for the right people. Several good homes and farms for sale. Write for information to Bruce Craven, Trinity, N. C.

HERNDON, VA., the best location in Northern Virginia for young enterprises that intend to grow. What do you make that the farmers, the dairymen and the fruit growers need for the production and distribution of their output? We offer railroad, large electric power and water facilities. Eight miles from Superpower plant site at Great Falls. Address Chamber of Commerce.

FACTORY SITES

FOR SALE—FACTORY SITES in best diversified successful manufacturing city in United States. Warren Ross Lumber Co., Jamestown, N. Y.

FACTORY SITES

For Sale
MANUFACTURING SITE
on Railroad and Water
Hastings Bros., Norfolk, Va.

INDUSTRIAL LOCATION in Louisiana—640 acres located on main line Illinois Central R. R., Town of 3500, good schools, churches and plenty of labor, unlimited supply of pulp and box wood, industrial tracks on site. Price \$20.00 per acre. Address No. 6213, care Manufacturers Record, Baltimore, Md.

WARSAW, NORTH CAROLINA
Has all the facilities required for manufacturing enterprises of any kind. Its climatic conditions, its railroad facilities and the large population of laboring people in the near vicinity make it a most desirable point. Manufacturers are invited to correspond with us with reference to locating here. Address Secretary.

CHAMBER OF COMMERCE,
Warsaw, N. C.

PATENT ATTORNEYS

PATENTS—TRADEMARKS—INVENTORS SHOULD write for our free Guide Books, List of Patent Buyers and RECORD OF INVENTION BLANK before disclosing their inventions. Send model or sketch and description of your invention for our free opinion of its patentable nature. Highest references. Reasonable terms. VICTOR J. EVANS & CO., 712 Ninth, Washington, D. C.

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AGENCIES WANTED

MANUFACTURERS can secure agent for mechanical machinery and architectural ma-terial, territory Maryland and Virginia. W. J. Spencer, 410 Bond Bldg., Washington, D. C.

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Manufacturers of Household or Consumers Specialities

In Cincinnati, Ohio, there is a real live established sales agency with show room space, centrally located, who are desirous of adding to their present successful busi-ness a real live selling proposition of merit backed-up by a manufacturer with a na-tional reputation who can give an organi-zation of this caliber real cooperation. Ad-dress No. 6219, care Manufacturers Record.

SITUATIONS WANTED

SALES EXECUTIVE OF PROVEN ABIL-ITY is open for position with responsible and old established manufacturing concern as exclusive representative for the state of Florida and adjoining states. Am thorough-ly familiar with this territory and know conditions and trade requirements. Position must be permanent and all-year proposition. No. 6211, care Manufacturers Record.

YOUNG MAN nine years executive ex-perience finance, accounts, purchasing, sales, production, etc. For past six years con-fidential assistant to President large inter-ests. Good education; good health; correct appearance; clean and successful record. Discontinuance of operation account perma-nent illness of President reason for seeking new connection. Location or entrance sal-ary of little importance but desire perma-nent connection where advancement is pos-sible as ability is proven. Address 6217, care Manufacturers Record.

MEN WANTED

Salaried positions \$2500 to \$25,000 up-ward; executive, technical, administrative, engineering, manufacturing, professional managing, financial, etc., all lines. If you are qualified, and receptive to tentative offers for a new connection you are invited to communicate in strict confidence with the undersigned, who will conduct pre-liminary negotiations for such positions. A method is provided through which you may receive overtures in confidence, with-out jeopardizing present connections, and in a manner conforming strictly to pro-fessional ethics. Send name and address only; preliminary particulars will be sent without obligating or compromising you in any way. R. W. Bixby, Inc., 403 Lockwood Building, Buffalo, N. Y.

MEN WANTED

BIG MONEY FOR HUSTLERS
An Unusual Opportunity for a few high grade men or firms to act as distributors for patented article backed by highly rated established company. This article is nation-ally advertised, known in every state, and used by the country's largest firms. En-ables them to get more power at less cost using same machinery. All or part time men acquainted with engineers, factories, ice companies, railway mechanical execu-tives, machine shops, preferred. Write for application blank. Box 502, Wellston, St. Louis, Mo.

WANTED—Sewer foreman, experienced in wet excavation.

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900 Realty Building, Charlotte, N. C.

BUSINESS OPPORTUNITY.—Wanted to secure a competent man to manage a Work Shirt Manufacturing plant who is in position to take some stock in same. The plant is now in operation. Address No. 6220, care of Manufacturers Record, Balto., Md.

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FOR SALE.

One Sturtevant Roll, new, with two million tons 54% iron ore, close to switch.

C. G. Samuel, Athens, Tenn.

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2—90 Ton "Shay" geared Engines, Stand-ard Gauge. Boilers ICC test, 200-lb. pres-sure. All ICC and ARA safety appliances. Splendid shape, immediate delivery. Built in 1912 and 1917; Automatic couplers, elec-tric lighted. Location RAINELLE, W. Va. Address I. K. DYE, Box 612, Elkins, W. Va.. Dealer in Locomotives, Rails etc.

1 Monroe Calculating Machine 8
Keys good as new.....\$150.00
Address No. 6212, care Manufacturers Rec-ord, Baltimore, Md.

GIRDERS, BEAMS—For Sale—One gir-der composed of two 15-inch I-beams with 1/4-inch plate riveted on the bottom; 26' 5 1/2" long. One girder, same as above, 25' 11 1/2" long. Three 8-inch I-beams, 8' 4 1/4" long. Except for slight scale, in good condition. Phil P. Scroggs, 610 Lamar Building, Augusta, Ga.

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Entire machinery in plant to be sold at auction piece by piece. High class modern slightly used lum-ber mill machinery including engines and boilers of Seaford Planing Mill Company. Sale on premises, Seaford, Delaware, Wednesday morning, September 26th, 10:00 o'clock. Every machine in perfect work-ing condition, including basket and crate machines. Rare opportunity for mill man to buy for replacement or enlargement, for dealers to buy new machinery at auction values. Open daily for inspection. For com-plete list address

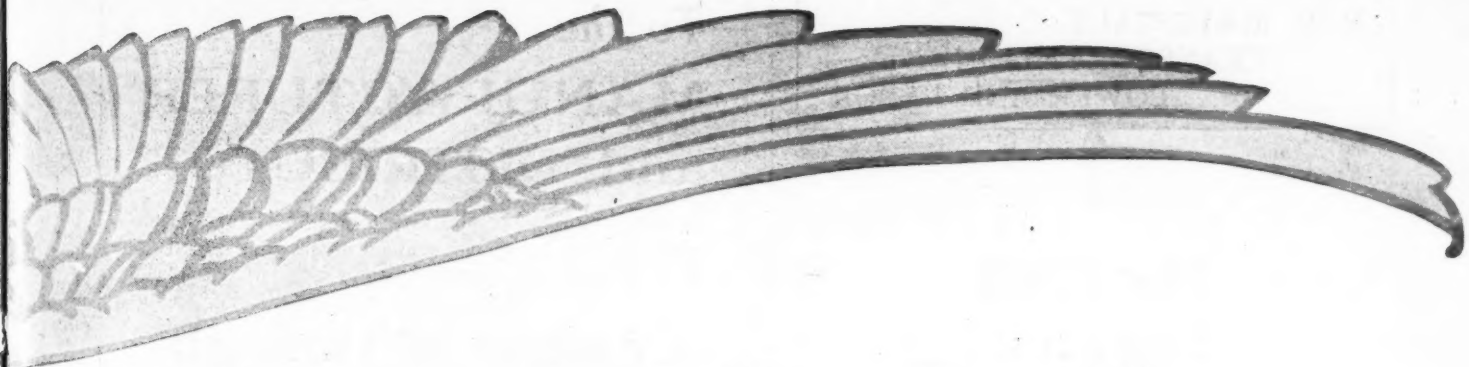
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To ensure you more leeway, send your name and address at once to Major J. L. Frink, Chief, Sales Promotion Section, Room 2515 Munitions Building, Washington, D. C. Advise him the character of materials you are interested in, and if such items are available in future sales your name will be placed upon the War Department mailing list and catalogs of such sales forwarded you as rapidly as sales are scheduled.



Final commodity sales are now being scheduled. Stocks of Quartermaster Supplies are to be offered at auction at Brooklyn, Sept. 27; Chicago, Oct. 18; San Antonio, Oct. 24; San Francisco, Oct. 30. Additional sales will be announced as scheduled.

Important sales of Real Estate, Buildings, Plants and Warehouses will be held at Camp Devens, Ayer, Mass.; Ordnance Reserve Depot, Amato, N. J.; Ordnance Reserve Depot, Toledo, Ohio; Camp Knox, Louisville, Ky.; and Camp Lewis, American Lake, Wash. Definite dates will be announced later.

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Stock and Equipment—Comprising large lot of Valves, Babbitt Metal, Files, Drills, Millers, Nuts and Bolts, Sheet Iron, Bench Vises, Reamers, Cutters and small Tools of every description, about 750 tons of Scrap Iron, Steel Bars, Office Furniture, Blueprinting Machine, Micrometers, Gauges, etc.

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Full and detailed information upon application.

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Steam heat and electric power. Located in town having three railroads. Plenty labor—both male and female. Living conditions very reasonable. A wonderful opportunity for a firm looking for new location or desiring an additional plant.

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AN UNUSUAL OPPORTUNITY

Is offered to purchase a series of one story buildings with tools and machinery and full line of auto material and parts, including wheels, springs, axles, carburetors, motors, etc. Buildings appraised at \$57,000.00; machinery and tools \$32,000.00; material \$201,000.00. Can be bought at great bargain. Fine opportunity for experienced manufacturer to establish auto plant or plant for manufacturing bodies. Situated in Middle Atlantic States. Fine distributing point on three trunk line railways and plant immediately on main line with spur track. Your inquiry and investigation invited.

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Years of experience in the manufacture and distribution of Dissolved Acetylene has established a high standard for

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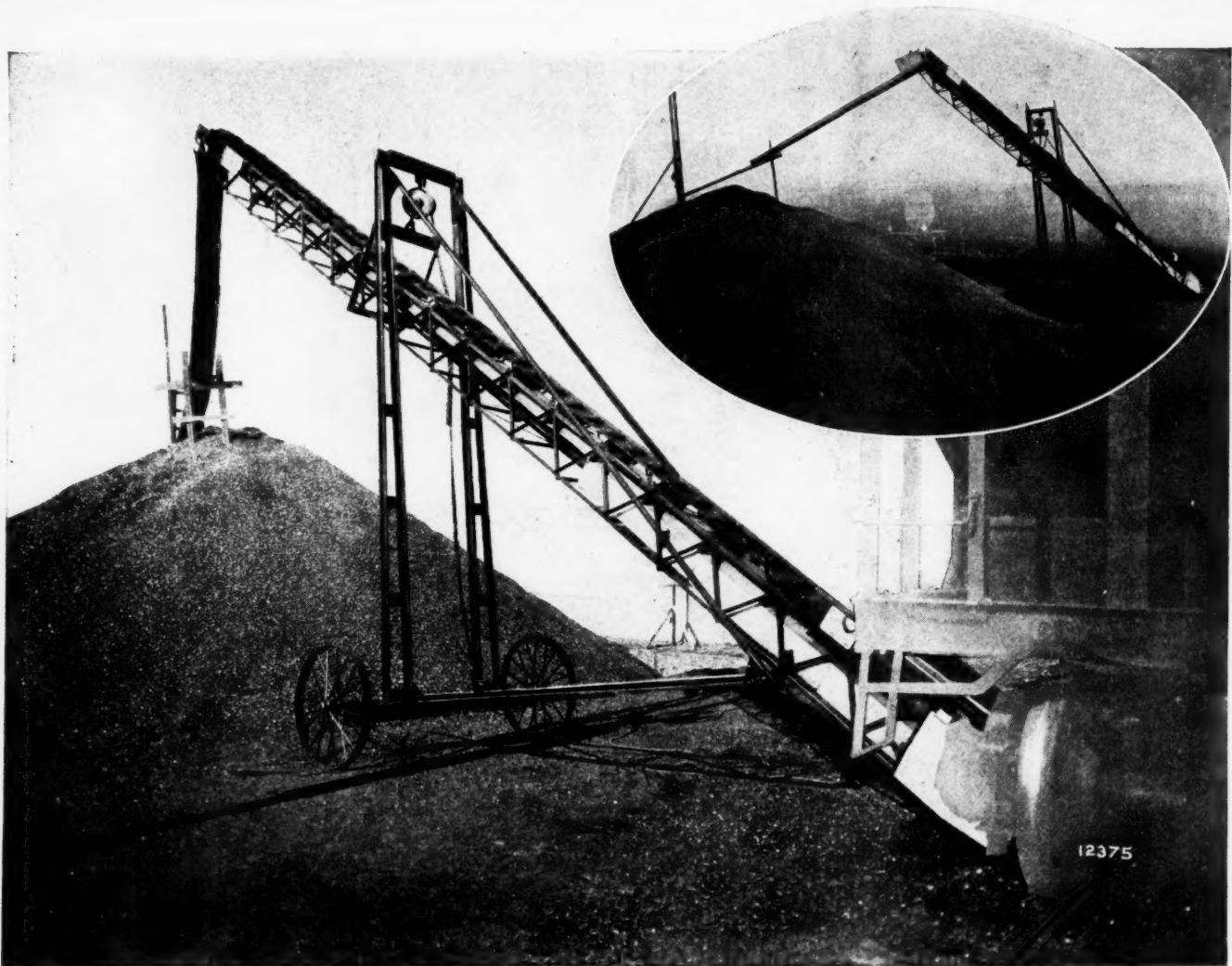
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"Buy your Coal and Buy it quick"

Manufacturers Record, July 5, 1923

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Thus Manufacturers Record aptly describes the present situation.

Summer storage of coal need not involve complex systems or expensive equipment. Link-Belt engineers (through 50 years of experience) can show you how to store coal economically and profitably, even though your problem is "different."

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